PART A

IONOSPHERIC DATA

ISSUED
OCTOBER 1964

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

CRPL-F 242
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
30 Oct. 1964

IONOSPHERIC DATA

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IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data collected by CRPL in the course of its research and service activities. Through the CRPL-F series, as part of the general exchange of scientific information, these data are made available for use by others in research on radio propagation and the ionosphere, and in other geophysical applications.

In the CRPL-F series, Part A, tables of monthly median values of vertical-incidence ionospheric data are presented accompanied by graphs of critical frequencies and M(3000)F2. The tables include the number of values entering into the median determination (count). When available, the upper and lower quartile values (indicated by UQ and LQ) are listed for foF2, foF1, foEs, M(3000)F2, h'F2 and h'F. Space limitations do not permit inclusion of quartile values for the other characteristics. The tables are prepared by machine methods and the graphs are plotted automatically.

The tables and graphs present the ionospheric data as received from the originating laboratory. Responsibility for the accuracy and reliability of the data rests entirely with the originator. Medians of data for the U.S. stations are computed by CRPL in accordance with the recommendations of the World-Wide Soundings Committee.

Data will appear in the F-series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the World Data Center A for Airglow and Ionosphere. In general, priority of publication is given to the most current data. Data received too long after the month of observation may experience an indefinitely prolonged delay before finding space in the F series, Part A.

Information on symbols, terminology and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

Units and Abbreviations of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle	MED - Median
foF1, foE - - - Hundredths of a megacycle	CNT - Count
h'F2, h'F, h'E - Kilometers	UQ - Upper Quartile
M(3000)F2 - - - Hundredths	LQ - Lower Quartile

Key to Points of Ionospheric Data Graphs

foF2: x foE : ⊙ M(3000)F2 : ◇

foF1: ▵ foEs: +

< Less-than value indicated. > Greater-than value indicated.

\- - - Interpolated value indicated.

The following table contains the latest available information on twelve-month smoothed average of observed Zurich relative sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1963, the succeeding values being based on provisional data.

Smoothed Observed Zurich Relative Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	37	35	33	31	30	30
1963	29	30	30	29	29	28	28	27	27	26	23	21
1964	19	17	15									

NOTICE OF CHANGE OF FORMAT

Beginning with this issue, tables and graphs of ionospheric data will appear on the same page side by side, with two station months of data summary tables and their corresponding graphs on a single page. The same number of station months of data will appear per issue. The change in proportion of the graphs permits somewhat larger printing for the tabulated data, resulting in more legible tables. We believe that most readers will also find the new arrangement more convenient to use.

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA PRESENTED IN THE 100 TABLES AND GRAPHS OF THIS ISSUE WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION, AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA:

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TAIPEI (TAIWAN), CHINA

INSTITUTO GEOFISICO DE LOS ANDES COLOMBIANOS
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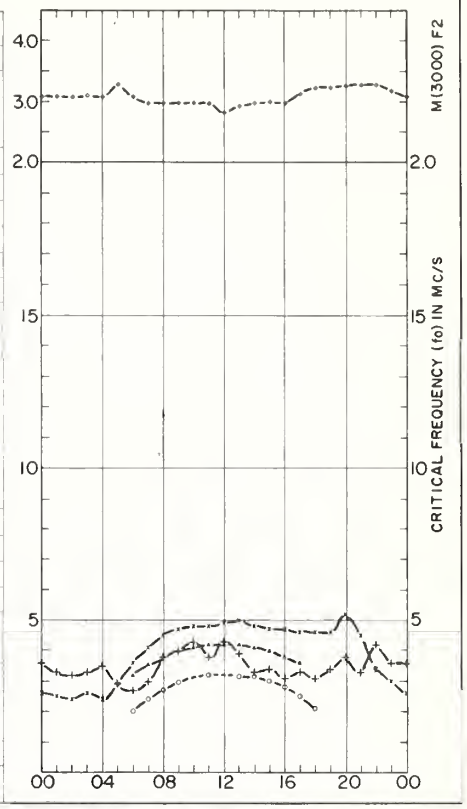
TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)

July 1964 - January 1962

BOULDER
COLORADO LAT. 40.0N LONG. 105.3W SWEEP 0.25 MC TO 20.0 MC IN 27 SEC TIME 105.0W 1964 07 BOULDER 105.0W

JULY 1964

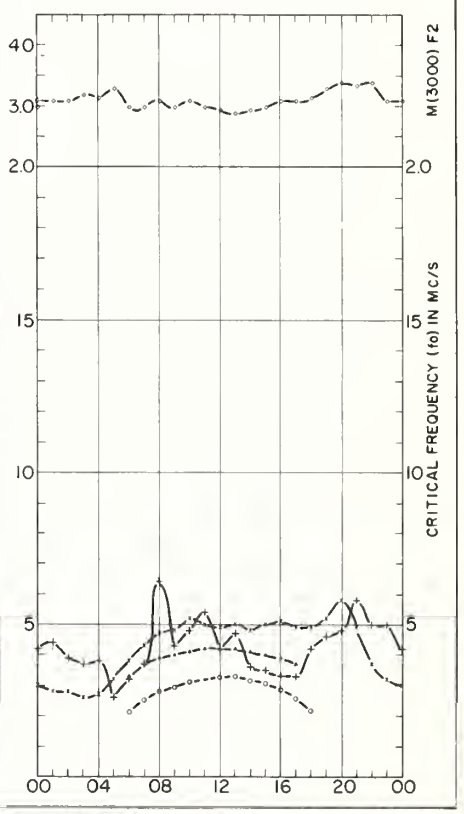
CHAR. \ HR.		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	26	25	24	26	24	29	36	41	45	47	48	48	49	50	48	47	47	46	46	46	52	45	34	30
	CNT	23	27	25	26	28	31	29	30	28	27	29	29	28	29	30	30	31	29	31	31	31	27	28	26
	U Q	28	28	26	26	26	31	39	43	50	50	52	52	52	52	50	50	50	50	50	50	55	49	38	32
00	L Q	24	23	22	23	22	27	34	38	41	40	44	44	45	46	46	46	45	44	44	44	45	40	E 32	27
foF1	MED							320	355	380	400	410	420	420	420	410	400	380	360						
	CNT						1	9	22	24	23	27	28	27	26	27	26	24	15	2					
	U Q							335	370	385	400	410	420	420	420	420	400	390	370						
10	L Q							315	350	375	390	400	410	410	410	410	400	380	360						
foE	MED							200	240	270	295		320		315	315	300	280	250	210					
20	CNT							5	8	7	7	2	6	4	5	7	11	12	15	7					
foEs	MED	M 36	M 33	M 32	M 33	M 35	M 29	27	30	38	40	43	38	43	39	33	34	31	33	31	M 34	M 38	M 33	M 42	M 36
	CNT	20	17	13	15	25	29	29	30	22	30	30	30	27	29	21	30	31	30	29	26	16	27	26	25
	U Q	M 46	M 42	M 40	M 41	M 42	M 42	32	36	M 67	M 60	M 58	M 55	M 58	M 52	42	41	M 38	M 37	M 44	M 48	M 52	M 53	M 52	M 46
30	L Q	M 31	M 28	M 30	M 29	M 28	18	24	27	32	33	34	33	34	34	28	31	E 28	E 26	24	26	M 31	M 30	M 31	M 29
M	MED	310	310	310	312	310	330	310	300	300	300	300	300	285	295	300	302	300	315	325	325	328	330	330	320
3000	CNT	17	26	20	24	20	31	25	27	27	25	29	29	28	29	30	30	30	29	31	31	30	26	26	23
F2	U Q	340	320	318	322	320	340	338	320	320	328	318	310	300	308	310	310	320	332	330	340	335	340	340	335
03	L Q	310	300	302	305	300	320	265	280	270	250	275	262	268	265	270	290	290	300	305	315	315	310	315	310
h'F2	MED							486	400	375	360	380	390	402	380	370	380	369	324	289					
	CNT						2	12 G	23	27	25	29	29	28	29	30	30	27	26	19	2				
	U Q								440	470	559	452	505	486	490	479	409	400	345	310					
04	L Q							405	350	310	309	320	336	356	354	350	340	330	300	270					
h'E	MED																								
	CNT						115	109	103	100	100	100	100	100	100	100	100	102	104	110					
24																									
h'F	MED	E S 274	E S 275	E S 280	E S 273	E S 265	239	210	200	190	185	181	183	189	185	198	194	200	206	210	E 230	231	235	E 241	E S 249
	CNT	26	31	30	30	31	30	26	28	25	23	27	27	27	25	25	26	27	28	26	30	31	31	31	30
	U Q	E S 285	E A 298	E S 290	E S 281	E S 289	249	219	214	208	190	E 193	190	200	200	205	200	218	210	218	E 250	E A 241	E A 240	E 253	E S 270
16	L Q	E S 265	E S 260	E S 269	E S 260	E S 249	225	202	195	185	179	178	178	180	180	186	189	190	195	200	223	E 219	E 220	E 232	E S 239
CHAR. \ HR.		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



BOULDER
COLORADO, U.S.A. LAT. 40.0N LONG. 105.3W SWEEP 0.25 MC TO 20.0 MC IN 27 SEC TIME 105.0W 1964 06 BOULDER 105.0W

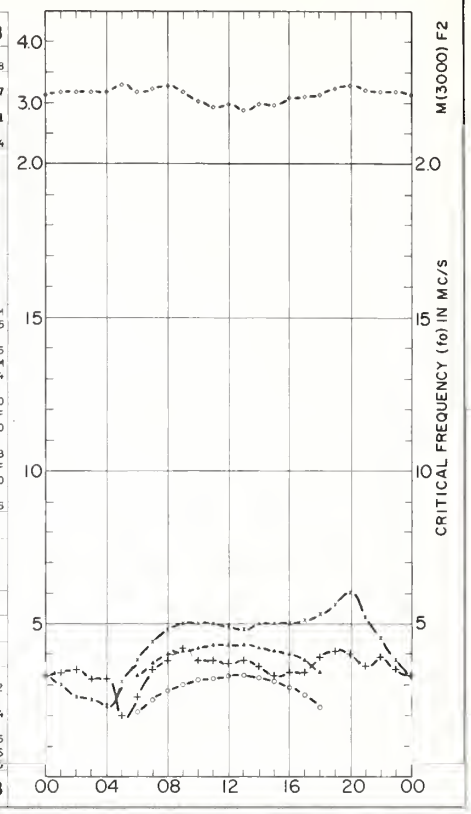
JUNE 1964

CHAR. \ HR.		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 30	28	U F 28	U F 26	U 27	32	38	43	47	48	52	50	49	50	48	50	51	49	49	52	58	49	37	32
	CNT	18	U 16	U F 18	U F 18	U F 21	23	21	21	18	21	22	21	24	23	23	25	22	23	20	24	23	23	19	14
	U Q	34	U F 30	U F 30	U F 29	28	35	40	44	50	54	56	54	54	52	50	50	52	52	52	54	61	53	42	37
00	L Q	26	U F 27	U F 26	U F 25	24	29	35	40	44	44	46	48	47	47	46	47	48	47	47	50	54	46	34	30
foF1	MED							330	370	390	400	410	420	420	420	410	400	390	370						
	CNT						1	12	16	11	17	19	15	22	19	21	22	18	8	1					
	U Q							340	370	390	410	420	420	430	420	420	400	400	375						
10	L Q							325	355	380	400	410	410	410	420	410	400	380	370						
foE	MED							210	250	278	292	310		325	328	315	305	285	255	215					
20	CNT						2	5	8	6	8	5	2	5	8	11	15	14	17	9					
foEs	MED	M 42	M 44	M 39	M 37	M 38	26	32	37	M 64	43	48	M 54	42	47	36	35	33	33	M 42	M 46	M 48	M 58	M 50	M 50
	CNT	21	19	19	16	16	23	21	22	22	23	22	22	24	25	21	25	20	23	22	21	20	20	17	19
	U Q	M 58	M 60	M 58	M 46	M 40	M 41	M 59	M 55	M 70	M 73	M 70	M 69	M 55	M 58	44	46	40	M 47	M 58	M 64	M 59	M 66	M 64	M 68
30	L Q	M 36	M 35	M 32	M 30	M 32	19	28	33	35	35	36	36	35	34	33	32	30	27	29	30	M 38	M 40	M 38	M 35
M	MED	310	310	U F 310	U F 320	315	330	300	300	310	300	310	300	295	290	295	300	310	310	315	330	340	335	340	310
3000	CNT	13	7	8	11	12	21	21	20	18	21	22	21	24	22	22	25	21	22	19	23	21	21	13	10
F2	U Q	325	315	U F 318	U F 330	332	342	330 G	310	320	312	315	308	315	305	300	310	320	320	330	330	340	348	345	330
03	L Q	308	300	308	310	308	320	265 G	278	290	265	290	278	285	280	280	290	298	300	305	315	330	320	320	300
h'F2	MED							453	372	336	389	358	380	394	395	403	370	344	316	300					
	CNT						2	14 G	18	18	20	23	21	24	23	23	25	22	20	17	3				
	U Q								430	380	484	425	432	420	448	427	406	370	330	312					
04	L Q							340	339	310	338	320	346	340	370	380	358	311	310	284					
h'E	MED																								
	CNT						115	110	105	104	103	103	104	103	104	103	105	105	109	110					
24																									
h'F	MED	E 273	E 280	E 281	E 272	E 270	230	220	214	189	190	190	198	194	190	200	209	205	219	212	240	E 230	E 236	E 240	E S 260
	CNT	21	19	19	21	23	23	21	16	11	14	18	15	20	19	21	23	19	17	12	23	23	24	22	18
	U Q	E A 300	E A 319	E A 300	E A 300	E 293	240	230	227	202	200	200	205	201	201	210	220	220	226	222	E A 258	A 237	E A 248	E A 258	E A 288
16	L Q	E S 256	E S 271	E S 263	E S 255	E S 249	225	210	200	181	181	183	180	184	180	190	200	202	208	202	230	E 225	220	220	E S 240
CHAR. \ HR.		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



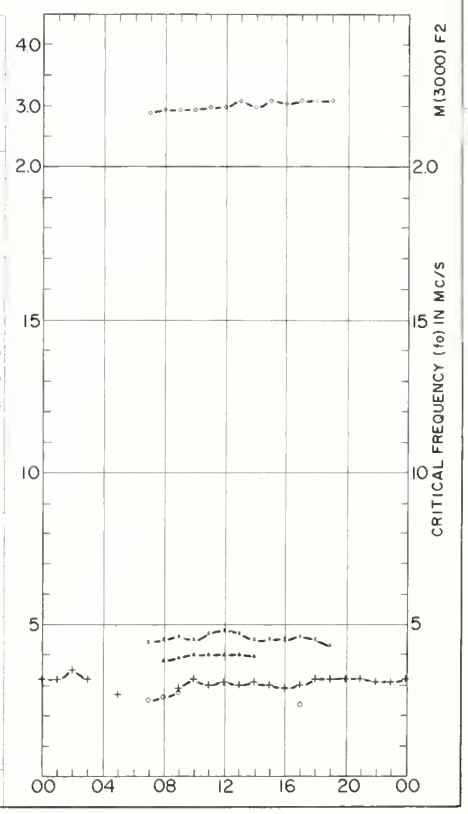
FT BELVOIR
VIRGINIA, USA
LAT. 38.7N LONG. 77.1W
SWEEP 1.0 MC TO 25.0 MC IN 27 SEC
TIME 75.0W
JUNE 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	33	30	26	25	23	31	38	44	48	50	50	50	49	48	50	50	50	51	53	56	60	52	45	38
	CNT	26	24	20	26	26	27	26	27	30	28	28	29	29	30	30	30	30	29	29	30	30	28	29	27
	U Q	35	32	30	27	25	32	40	46	50	53	52	53	52	51	52	52	53	54	55	61	63	55	46	41
00	L Q	29	27	24	22	21	29	35	42	45	46	46	46	46	43	46	48	48	48	50	52	54	48	39	34
	MED							330	370	400	410	420	430	430	430	420	410	400	380	340					
foF1	CNT						2	7	22	26	27	28	28	28	28	29	28	27	23	13					
	U Q							350	380	400	420	430	430	430	430	430	420	400	390	350					
10	L Q							320	360	390	400	420	420	420	430	420	400	390	370	340					
foE	MED							210	250	280	300	315	320	328	330	322	310	290	265	225					
20	CNT						2	12	13	13	18	13	12	10	10	14	24	25	26	17	2				
	MED	33	34	35	32	32	20	26	35	38	42	38	38	37	38	36	33	34	34	39	41	40	36	39	35
foEs	CNT	27	23	21	21	24	28	28	29	30	30	30	30	30	30	30	30	30	30	30	30	28	28	24	25
	U Q	45	42	44	38	42	35	40	54	45	55	45	48	48	58	47	36	40	42	60	53	57	48	44	54
30	L Q	28	28	28	30	25	17	23	30	33	38	34	33	34	35	34	32	30	30	30	28	32	28	29	30
M	MED	315	320	320	320	320	332	320	325	330	320	305	295	300	290	300	298	310	312	315	325	330	322	320	320
3000	CNT	24	23	18	25	24	26	24	25	26	27	27	27	27	29	27	30	30	28	23	28	29	26	26	23
F2	U Q	320	325	320	330	322	340	340	340	340	335	320	320	315	310	310	315	320	320	330	330	332	335	330	330
03	L Q	310	310	310	310	308	320	295	300	320	280	265	280	275		260	290	300	302	310	320	325	315	320	305
	MED							365	332	315	330	362	400	385	410	375	372	340	320	290	252				
h'F2	CNT						4	16	24	27	27	28	27	30	29	28	30	30	29	27	26				
	U Q							378	350	440	445	430	470		500	405	365	335	310	265					
04	L Q							260	305	285	305	320	330	340	360	348	335	320	302	280	250				
h'E	MED							109	105	101	101	101	101	101	101	101	101	103	105	109	115				
24	CNT						4	28	29	30	30	30	28	28	26	28	29	30	30	29	7				
h'F	MED	260	250	260	275	275	240	220	215	205	200	190	182	190	205	200	200	205	212	220	242	230	232	240	242
	CNT	27	26	23	28	26	25	23	23	23	25	24	26	26	27	24	28	25	24	19	12	29	30	27	24
	U Q	270	280	300	300	310	250	230	225	210	205	200	200	200	230	205	210	220	220	250	255	250	240	250	265
16	L Q	245	240	250	260	260	230	210	210	200	185	180	180	180	195	200	200	200	200	215	230	220	225	230	230
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



TROMSO
NORWAY
LAT. 69.7N LONG. 19.0E
SWEEP 0.7 MC TO 25.0 MC IN 300 SEC
TIME 15.0E
MAY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED								44	45	46	45	47	48	47	45	45	45	46	45	43				
	CNT				3	2	3	4	8	13	13	5	13	10	16	11	16	15	8	9	9				
	U Q								45	48	47	45	49	50	49	50	48	46	47	46	45				
00	L Q								43	45	45	44	45	45	45	45	44	44	45	44	42				
	MED									380	390	400	400	400	400	395									
foF1	CNT								4	13	11	5	12	11	8	7	4	4							
	U Q									385	400	400	400	405	400	400									
10	L Q									325	390	385	400	400	395	390									
foE	MED								250	260	275								235						
20	CNT						1	2	6	5	8	2	1	3	1	3	2	2	5	2					
	MED	32	32	35	32		27	G	G	G	29	32	30	31	30	31	30	29	30	32	32	32	32	31	31
foEs	CNT	10	15	10	5	4	5	14	16	22	23	18	20	17	21	20	24	24	25	30	24	13	10	11	10
	U Q	49	40	40	43		G 30	25	27	32	32	32	34	33	31	32	32	32	32	32	39	32	32	32	40
30	L Q	32	30	31	29		G	G	G	G	G	G		G	G	G	G		G			28		25	29	30	32	30	28
M	MED								290	295	295	295	300	300	310	300	310	305	310	310	310				
3000	CNT				2	1	2	3	7	13	12	6	12	11	12	9	16	13	9	9	8	1			
F2	U Q								290	295	305	300	305	310	320	315	310	310	320	315	315				
03	L Q								270	290	265	280	290	290	300	285	300	290	310	300	300				
	MED								400	365	370	385	365	350	380	390	365								
h'F2	CNT							1	5	14	12	7	13	12	9	7	5	4							
	U Q								400	380	400	410	400	435	411	410	425								
04	L Q								350	350	350	345	370	370	335	350	340	330							
h'E	MED							110	110	105	105	105	100	115	100	110	105	110	115	115	120				
24	CNT							7	11	15	15	11	7	6	5	8	14	13	14	14	5				
	MED	270	260	270	250	240	230	220	220	205	200	200	200	200	205	205	200	215	230	225	240	245	260	270	290
h'F	CNT	7	8	10	14	12	13	15	18	21	23	18	22	18	19	18	17	18	16	11	15	11	10	9	9
	U Q	290	280	270	250	250	245	230	220	215	215	205	205	205	210	215	213	235	240	235	245	265	276	295	280
16	L Q	253	255	250	250	225	225	210	200	200	200	200	200	200	200	200	200	210	200	220	235	240	250	255	260
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

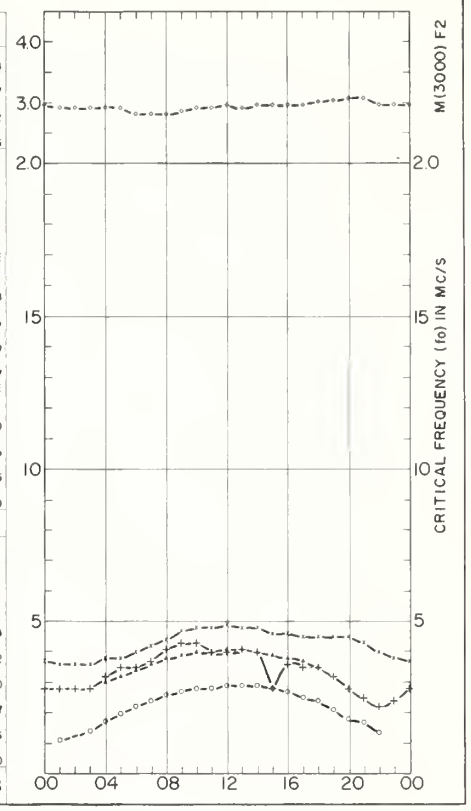


SODANKYLA
FINLAND

LAT. 67.4N LONG. 26.6E SWEEP 1.4 MC TO 22.0 MC IN 480 SEC TIME 30.0E

MAY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		37	36	36	36	38	38	40	42	44	47	48	48	49	48	48	46	46	45	45	45	45	43	40	38
	CNT		25	23	24	25	27	27	25	25	24	27	26	29	27	26	25	28	29	27	30	29	28	27	27	27
	U Q		40	40	38	38	40	41	42	44	47	49	50	51	51	51	51	48	48	47	47	47	47	46	43	42
00	L Q		33	33	33	32	34	37	38	40	43	44	45	46	45	46	45	45	43	43	43	43	42	39	36	35
foF1	MED						300	320	340	360	380	390	400	400	410	410	400	390	380	370	350					
	CNT						10	18	26	26	25	28	26	28	27	27	28	28	28	18	8					
10																										
foE	MED			110	E	140	172	197	220	240	260	270	280	280	290	290	290	280	270	250	240	210	180	168	135	E
20	CNT		2	3	5	9	12	14	19	17	11	15	16	13	13	15	17	19	20	21	21	14	12	12	14	8
foEs	MED		28	28	28	28	32	35	35	37	41	43	43	40	40	41	40	28	36	35	35	32	28	25	22	24
	CNT		29	28	25	28	30	29	29	27	27	29	27	30	27	28	27	29	28	30	29	30	30	28	28	29
	U Q		40	33	39	31	40	37	40	41	43	48	50	43	44	52	46	42	40	41	41	38	40	35	29	27
30	L Q		23	24	24	24	28	32	31	34	38	39	34	E 28	E 29	30	E 34	E 28	E 27	E 25	27	28	25	19	13	E
M	MED		300	295	295	295	295	295	285	285	285	290	295	295	300	295	300	300	300	300	305	307	310	310	300	300
3000	CNT		25	22	23	25	26	27	26	25	25	28	26	29	27	27	25	28	28	27	29	28	28	25	26	26
F2	U Q		310	300	300	302	300	305	290	298	297	295	300	305	310	310	310	305	310	310	312	315	315	310	310	305
03	L Q		290	290	285	290	280	280	270	260	270	280	290	275	280	280	290	285	292	290	300	300	302	300	295	290
h'F2																										
04																										
h'E	MED			135	100	130	115	110	105	110	105	105	105	105	105	105	100	110	110	105	110	110	115	115	115	123
24	CNT			2	1	5	11	13	17	17	11	15	16	13	12	15	17	19	20	21	21	15	11	11	9	2
h'F	MED		258	260	268	250	230	222	215	210	200	200	200	200	200	200	200	200	200	215	220	230	232	240	250	250
	CNT		26	26	26	26	28	28	27	27	27	28	26	29	27	28	28	30	28	28	30	26	28	27	27	27
	U Q		285	310	300	260	248	233	220	220	210	210	205	202	200	210	210	210	210	228	230	240	240	250	270	265
16	L Q		245	240	250	240	217	208	210	200	200	200	195	190	190	190	190	195	200	205	210	220	227	230	240	240
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

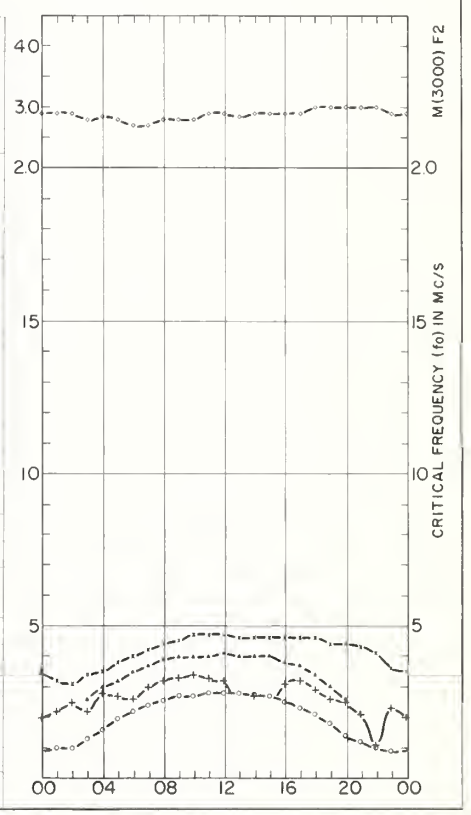


LYCKSELE
SWEDEN

LAT. 64.7N LONG. 18.8E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

MAY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		35	32	31	34	35	38	40	42	44	45	47	47	47	46	46	46	46	46	46	44	44	43	41	36
	CNT		24	24	25	25	27	29	29	29	28	29	29	28	31	30	30	31	29	31	31	30	30	29	28	29
	U Q		36	35	34	36	38	40	42	44	47	50	52	50	51	51	50	48	48	49	48	48	47	46	44	40
00	L Q		32	30	28	30	32	35	37	38	42	44	45	44	44	44	44	43	43	44	42	42	40	36	32	30
foF1	MED					260	300	320	350	370	390	400	400	400	410	400	400	400	380	370	340	300	260			
	CNT					4	16	27	29	28	27	29	29	29	30	30	29	31	29	26	25	9	4			
10																										
foE	MED			100	100	130	160	195	220	240	255	270	270	280	280	280	275	270	250	230	210	180	140	120	100	90
20	CNT			3	5	13	18	20	24	26	27	27	26	20	20	28	23	26	24	25	28	25	21	7	7	2
foEs	MED		20	22	25	22	28	27	26	30	32	33	34	33	32		27		31	32	29	26	25	21	11	23
	CNT		28	28	27	29	28	26	28	29	27	27	27	25	28	30	30	28	29	29	30	29	31	30	29	28
30																										
M	MED		290	290	290	280	285	280	270	270	280	280	280	290	290	285	290	290	290	290	300	300	300	300	300	290
3000	CNT		23	24	23	23	26	29	29	29	27	29	27	28	30	30	29	31	29	30	31	30	30	28	26	27
F2	U Q		300	300	300	300	300	290	280	280	290	300	300	310	300	300	310	310	310	300	310	310	310	310	310	300
03	L Q		280	280	280	280	270	255	230		260	265	270	270	260	270	265	260	270	290	290	290	300	290	290	290
h'F2	MED					320	380	400	410	430	400	390	370	370	380	370	350	350	345	335	300	285	270			
	CNT					3	12	21	29	29	27	29	27	28	30	30	27	31	27	22	20	5	3			
	U Q					360	490	540			435	425	400	430	455	415	400	450	390	360	310	300	270			
04	L Q					310	345	380	380	390	340	320	330	330	340	325	330	320	310	310	280	265	265			
h'E	MED		130	140	140	120	115	110	105	100	100	100	100	100	100	100	100	100	100	100	105	110	120	120	120	140
24	CNT		1	3	3	6	9	15	16	24	26	27	26	23	25	28	28	29	27	26	27	25	17	8	5	1
h'F	MED		265	270	265	250	240	230	220	210	205	200	200	200	200	205	210	210	220	225	235	240	250	250	250	250
	CNT		25	26	25	26	26	27	29	28	25	28	26	27	28	29	28	29	26	26	30	30	29	27	29	26
	U Q		285	290	285	270	250	240	230	215	220	210	215	215	210	210	215	225	230	240	240	245	250	260	260	270
16	L Q		250	250	250	235	235	220	210	200	200	190	195	195	190	200	200	200	210	215	230	230	240	240	240	240
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

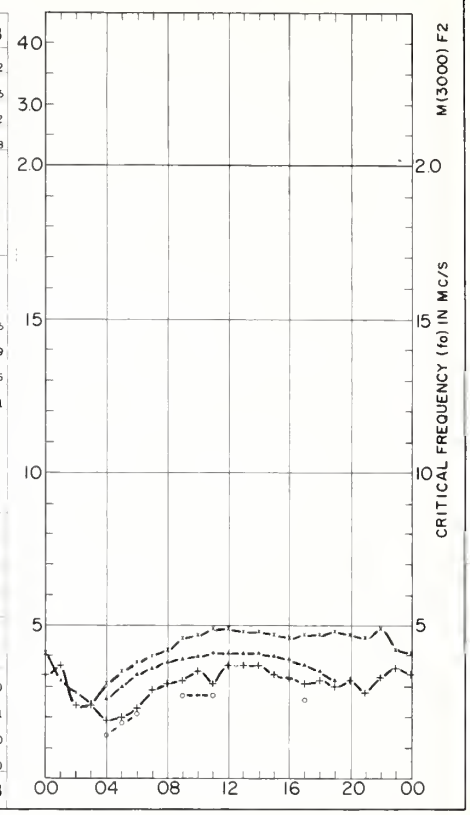


NURMIJARVI
FINLAND

LAT. 60.5N LONG. 24.6E SWEEP 1.0 MC TO 25.0 MC IN 60 SEC TIME 30.0E

MAY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	41	32	28	25	31	35	38	40	42	46	47	49	49	48	48	47	46	47	47	48	47	46	49	42
	CNT	2	5	6	9	16	22	25	25	27	23	29	28	30	30	29	30	30	28	26	30	22	12	5	6
	U Q		38	29	30	33	38	41	44	47	49	52	53	52	52	50	49	49	48	50	50	51	50	52	42
00	L Q		29	27	24	27	32	34	34	40	42	45	44	45	44	45	43	42	42	44	45	45	39	36	38
	MED					260	300	340	360	380	390	400	410	410	410	410	400	390	370	350	320				
foF1	CNT					1	10	19	26	28	26	28	30	30	29	31	31	28	20	11	1				
	U Q						310	340	370	380	400	410	410	410	410	410	410	400	380	350					
10	L Q						300	320	340	370	380	390	400	400	400	400	400	380	370	340					
foE	MED					140	180	210			270		270						255						
20	CNT					1	1	2			1		1						2						
	MED	34	37	24	24	19	20	23	29	31	32	35	31	37	37	37	34	33	31	32	30	32	28	33	36
foEs	CNT	7	9	18	14	25	30	31	26	29	31	22	31	20	21	18	18	20	31	27	30	27	20	9	9
	U Q	43	45	30	40	25	21	25	39	38	36	44	36	40	46	40	37	36	36	43	40	37	38	47	45
30	L Q	29	22	23	20	15	18	21	24	27	29	32	27	34	34	32	32	30	27	26	24	23	20	29	31
M 3000 F2																									
03																									
h'F2																									
04																									
h'E																									
24																									
	MED	270	280	285	280	260	230	220	210	205	200	200	200	200	200	200	200	205	220	230	250	260	255	240	250
h'F	CNT	25	29	28	25	30	29	29	29	31	28	29	30	30	31	31	31	31	30	29	31	31	30	31	31
	U Q	290	300	300	290	280	240	230	235	220	213	205	205	200	200	205	210	220	240	250	290	280	270	270	280
16	L Q	235	270	270	270	230	215	210	202	200	200	200	200	200	200	200	200	200	200	220	230	240	240	230	230
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

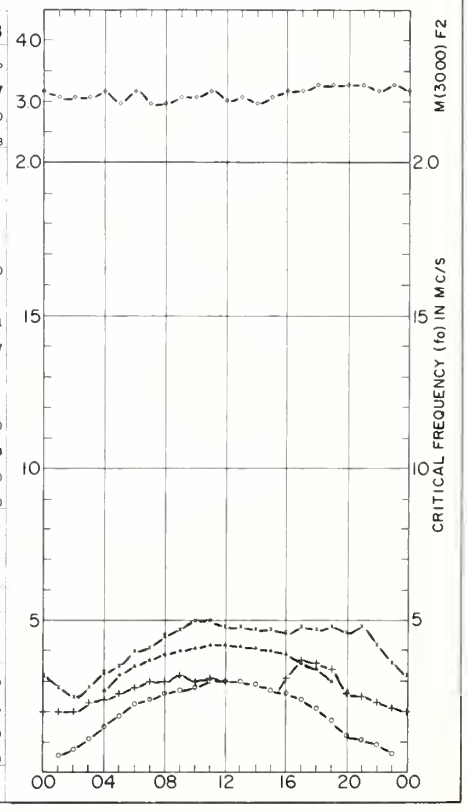


UPPSALA
SWEDEN

LAT. 59.8N LONG. 17.6E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

MAY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	MED	32	28	25	28	33	35	40	41	45	47	50	50	48	48	47	47	46	48	47	48	U 46	U 48	U 42	U 36
foF2	CNT	28	30	30	31	31	29	29	27	27	29	28	28	30	30	31	30	30	26	28	28	29	29	28	27
	U Q	35	30	28	30	35	40	42	45	49	50	52	51	51	50	49	50	49	50	U 50	U 48	U 50	U 50	U 48	U 40
00	L Q	25	23	22	25	30	33	34			42	45	46	45	45	44	44	43	45	45	45	U 42	U 40	U 36	28
	MED					270	320	350	370	390	400	410	420	420	415	410	400	390	360	340	300				
foF1	CNT					14	20	29	29	29	29	27	28	29	29	31	30	27	26	22	4				
10																									
	MED		U 55	U 75	110	150	185	225	240	260	270	280	300	300	300	290	270	260	240	210	170	U 120	U 105	90	U 60
foE	CNT			11	1	2	19	28	29	28	31	30	28	28	28	29	27	26	27	28	21	8	2	1	
20	MED	20	20	20	23	24	26	28	30	30	32	30	31	30				31	37	36	34	26	25	23	21
foEs	CNT	30	31	30	30	31	31	31	30	29	31	31	30	31	30	31	30	31	31	30	30	30	29	27	27
30																									
M	MED	320	310	310	310	320	300	320	300	300	310	310	320	305	310	300	310	320	320	330	330	330	330	320	330
3000	CNT	28	30	30	31	31	29	29	27	27	29	27	28	30	29	31	29	29	25	27	27	23	25	21	23
F2	U Q	320	320	310	320	330	330	330	320	330	330	330	330	320	330	330	320	330	330	330	340	340	330	330	330
03	L Q	300	300	300	300	290	285	270				280	300	270	295	280	280	295	310	320	320	320	320	315	310
	MED					350	400	375	450	395	370	355	330	390	360	360	355	350	315	295	280				
h'F2	CNT					17	19	27	26	27	29	28	28	29	30	31	30	29	25	25	9				
	U Q					475		520				460	400	625	410	485	450	415	340	300	295				
04	L Q					295	325	350	350	320	310	310	310	340	320	340	315	310	300	270	255				
h'E	MED			120	105	110	105	100	100	100	100	100	100	100	100	100	100	100	100	100	105	110	110	130	
24	CNT			1	1	2	19	28	29	28	31	30	28	28	28	29	27	26	27	28	21	8	2	1	
	MED	U 245	U 250	U 250	255	240	220	U 210	205	U 200	200	205	200	200	200	205	210	210	U 220	225	U 240	245	245	240	240
h'F	CNT	27	25	26	27	28	26	29	26	26	25	23	23	26	25	28	27	21	18	19	17	24	28	29	26
	U Q	U 250	U 260	260	285	250	230	U 220	215	U 210	210	210	210	205	210	210	215	U 220	U 235	240	250	250	250	U 250	250
16	L Q	U 235	U 240	250	250	240	210	U 210	200	200	200	200	195	200	200	200	200	200	205	U 215	U 230	240	240	U 235	230
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

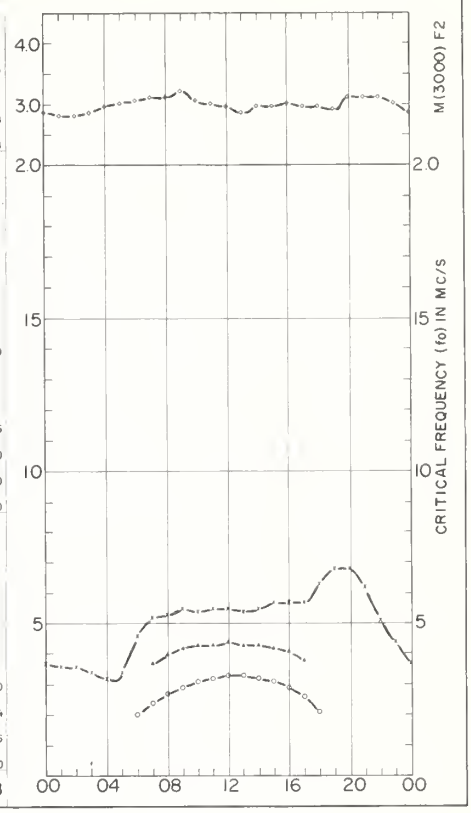


ROME
ITALY

LAT. 41.8N LONG. 12.5E SWEEP 1.4 MC TO 15.0 MC IN 300 SEC TIME 15.0E

MAY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	37	36	36	34	32	34	46	52	53	55	54	55	55	54	55	57	57	57	63	68 U	68	62	51 U	44
	CNT	22	25	24	22	22	24	23	22	22	19	21	21	25	24	26	26	23	21	22	21 U	7	14	16 U	21
	U Q	46	39	38	36	35	38	48	56	59	58	59	58	58	58	58	61	61	59	66	72 U	69	67	59 U	53
00	L Q	34	33	33	31	30	33	41	47	50	52	51	54	52	51	54	54	54	54	57	62 U	62	58	50 U	38
foF1	MED								370	400	420	430	430	440	430	430	420	410	380						
	CNT							3	14	14	15	15	18	18	21	22	22	11	9	1					
	U Q								380	400	430	430	440	440	440	430	430	410	390						
10	L Q								360	400	420	430	430	430	430	430	420	400	380						
foE	MED								200	240	270	290	310	320	330	330	320	310	290	260	210				
20	CNT								30	27	25	25	26	19	27	25	29	29	31	31	28				
foEs	MED																								
	CNT	30	30	30	30	30	30	30	30	30	30	30	29	31	30	30	29	30	31	30	30	31	30	30	30
30																									
M	MED	290	285	285	290	300	305	310	315	315	325	310	305	300	290	300	300	305	300	300	295	315	315	315 U	305
3000	CNT	22	25	23	21	20	23	22	21	22	18	20	21	25	24	26	26	23	20	19	20	7	12	14 U	20
F2	U Q	295	295	295	295	300	310	325	325	325	335	325	320	305	300	305	305	305	310	305	300	325	320	325 U	320
03	L Q	280	280	280	285	295	295	305	305	300	305	295	285	285	290	290	290	300	290	290	295	305	310	310 U	300
h'F2	MED								315	305	300	315	340	345	375	350	330	310	340						
	CNT							3	14	14	16	18	20	20	24	25	26	13	9	1					
	U Q								350	320	365	400	375	375	395	365	360	340	390						
04	L Q								290	290	285	300	305	335	345	340	320	310	310						
h'E	MED								130	110	110	110	110	110	110	110	110	110	120	120					
24	CNT								30	30	30	30	30	31	31	30	30	31	31	30					
h'F	MED	280	300	300	290	280	260	240	230	225	210	200	210	205	210	210	240	255	240	250	270	250	240	240	250
	CNT	24	25	25	25	22	23	22	17	17	16	14	17	18	20	15	8	8	6	9	20	19	23	21	24
	U Q	300	300	310	300	300	270	250	240	235	220	210	210	220	240	230	255	260	250	265	280	250	250	250	265
16	L Q	250	280	290	290	270	250	240	230	210	210	200	195	200	200	200	215	250	210	240	255	240	220	220	240
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

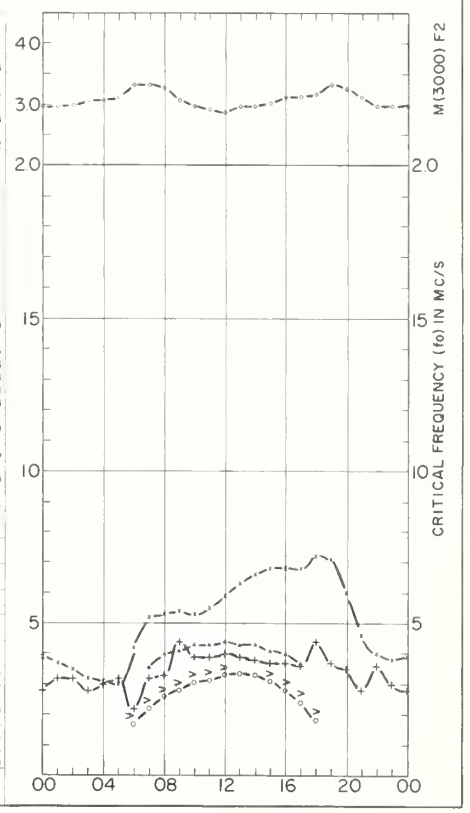


GRAND BAHAMA I.

LAT. 26.6N LONG. 78.2W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W

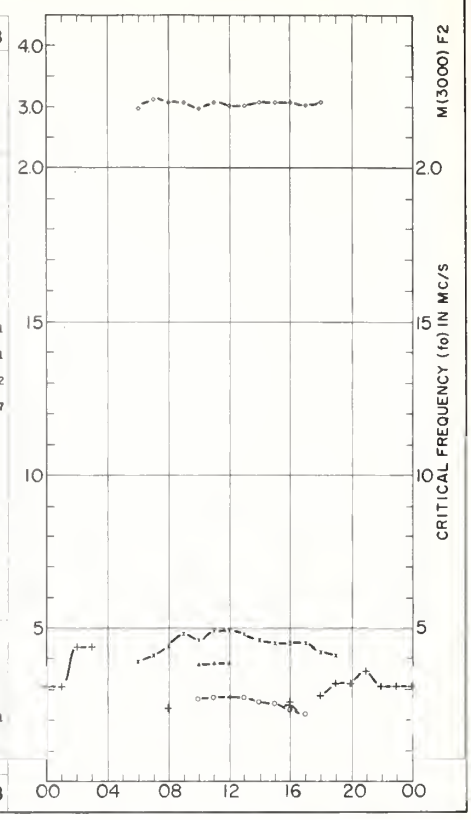
MAY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	39	37	35	32	31	30	42	52	53	54	53	55	59	63	66	68	68	68	72	71	60	46	40	38
	CNT	23	26	28	30	27	27	31	30	30	28	29	29	30	31	31	30	30	30	30	31	31	30	30	26
	U Q	43	40	38	37	35	33	47	56	55	57	58	60	64	67	72	72	73	74	77	78	66 D	50	44	43
00	L Q	33	33	32	30	29	27	38	47	47	49	50	51	54	58	59	62	60	57	63	63	53	37	32	32
foF1	MED								U L 355	400	410	430	430	440	430	430	410	400	370						
	CNT							1	12	20	20	26	25	24	28	30	28	28	20	4					
	U Q								U L 370	405	425	440	440	440	440	430	420	400	375						
10	L Q								U L 350	390	400	420	430	430	430	430	410	390	370						
foE	MED							D A	D A	D A	D A	D A	D A	D A		A	D A	D A	D A	D A					
20	CNT								168 220	260	280	305	312	332	335	330	310	280	240	182					
	MED	M 28	M 32	M 32	M 28	M 30	M 32	22	32	33	M 44	39	39	40	39	38	37	37	36	M 44	M 37	M 35	M 28	M 36	M 30
foEs	CNT	24	22	19	18	19	21	31	31	31	31	31	31	31	31	31	30	31	31	31	31	28	27	26	25
	U Q	M 36	M 42	M 45	M 40	M 37	M 36	26	M 45	M 52	M 58	M 58	M 50	M 50	43	44	44	40	M 50	M 58	M 57	M 52	M 45	M 48	M 38
30	L Q	M 23	M 23	M 28	M 22	M 22	M 22	19	27	28	34	35	36	37	33	34	34	31	31	23	M 28	M 28	M 23	M 30	M 23
M	MED	300	300	302	310	310	315	335	335	330	310	300	295	290	300	300	305	315	315	320	335	328	315	300	300
3000	CNT	22	26	28	30	U 25	27	31	30	28	27	29	29	30	31	31	30	30	29	30	31	30	29	30	26
F2	U Q	305	310	310	320	U 320	330	350	355	345	325	310	310	300	305	305	315	325	325	330	340	340	325	310	300
03	L Q	295	290	290	300	305	310	320	320	302	300	282	278	280	290	290	300	305	302	310	325	315	305	290	295
h'F2	MED								262 268	290	325	358 E	365	370	345	330	318	298	290	E 265					
	CNT								18 26	27	27	28	29	30	31	31	30	30	30	30					
	U Q								294 294	350	360	398 E	395	390	364	360	328	312	309 E	278					
04	L Q								252 254	270	317 E	330	346	345	323	305	300	288	275 E	255					
h'E	MED								115 110	107 E	105	105	105	105	105	106	108	108	110	E S 115					
24	CNT								21 29	31	31	29	29	31	31	30	31	31	30	11	2				
h'F	MED	E S 280	E S 271	E S 274	E S 260	E S 260	E S 250	E S 230	220	204	195	194	190	E 201	E A 209	E A 212	E A 215	215	E A 226	222	229	E A 222	E 236	E A 265	E S 275
	CNT	31	29	31	31	31	30	29	26	25	25	26	25	24	29	29	28	28	22	19	31	31	30	30	30
	U Q	E S 290	E S 290	E S 288	E S 280	E S 280	E S 270	E S 249	E A 240	E 210	E 206	E 218	E A 205	E A 223	E A 242	E A 230	E A 235	E A 235	E A 255	E A 235	E A 242	E A 236	E A 250	E A 275	E S 285
16	L Q	E S 265	E S 265	E S 260	E S 250	E S 240	E S 240	E S 220	212	200	188	185	H 185	E 185	188	E 202	209	210	213	E 218	220	E 218	E S 220	E S 250	E S 270
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



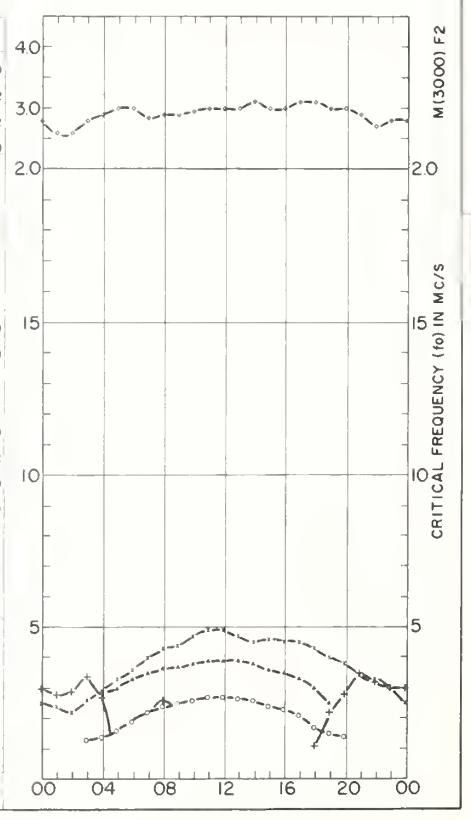
TROMSD NORWAY — LAT. 69.7N LONG. 19.0E — SWEEP 0.7 MC TO 25.0 MC IN 300 SEC — TIME 15.0E — APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED							39	41	44	48	46	49	49	48	46	45	45	45	42	41				
	CNT	1	1	1	2	4		7	9	12	11	12	13	19	17	14	17	16	11	12	7				
	U Q							40	43	46	51	50	51	52	50	53	48	48	49	46	43				
00	L Q							37	39	42	45	44	43	44	45	45	43	43	41	40	40				
foF1	MED											380	385	385											
	CNT									3	1	7	6	5	2		1								
	U Q											395	390	390											
10	L Q											375	380	380											
foE	MED											270	275		275	260	255	235	220						
20	CNT							3	4	2	4	11	7	3	5	7	8	8	8	4					
	MED	31	31	44	44			G	G	G 24	G	G	G	G	G	G	G		G 26		28	32	32	36	31	31
foEs	CNT	12	7	5	5	2	3	10	11	14	16	14	13	13	18	13	20	20	22	15	13	12	12	10	11
	U Q	32	46	51	51			21	26	26	G	G	G		G	G		32	32	32	40	46	49	31	32
30	L Q	31	30	35	31			G	G	G	G	G	G	G	G	G	G	G	G	G	30	30	31	28	27
M	MED							300	315	310	310	300	310	305	305	310	310	310	305	310					
3000	CNT				1	2		7	6	10	9	11	13	16	15	12	15	15	12	12	3				
F2	U Q							305	325	320	320	310	315	310	310	320	315	320	310	315					
03	L Q							280	295	290	300	280	295	290	280	310	310	300	300	310					
h'F2	MED											380	400												
	CNT								1	2	2	6	7	4	2	1	1								
	U Q											415	430												
04	L Q											355	350												
h'E	MED							115	115	120	110	110	115	115	115	115	115	115	120	125					
24	CNT							6	9	8	13	13	12	9	15	10	16	15	12	7	1				
h'F	MED		300			275	250	290	230	225	225	205	205	210	200	215	225	225	240	250	250	260	265		
	CNT	4	5	4	3	5	9	14	15	14	16	15	14	16	14	13	15	13	17	14	13	7	6	4	1
	U Q		305			280	255	250	240	235	225	210	210	220	210	225	235	250	250	250	265	280	270		
16	L Q		300			250	250	225	220	210	210	200	200	200	195	205	215	220	235	245	250	250	250		
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



KIRUNA SWEDEN — LAT. 67.8N LONG. 20.4E — SWEEP 0.5 MC TO 15.0 MC IN 30 SEC — TIME 15.0E — APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	25	24	22	26	29	33	36	40	43	44	47	49	49	47	45	46	45	45	43	40	38	34	33	30
	CNT	12	14	16	15	18	22	20	22	23	26	26	25	24	26	21	27	25	23	21	18	17	10	10	12
	U Q	28	28	28	28	32	34	40	43	46	48	50	50	53	53	50	49	48	47	48	45	44	38	34	32
00	L Q	23	22	21	22	28	32	34	36	38	41	43	44	44	45	44	43	42	41	38	34	32	30	29	30
foF1	MED					290	300	330	350	365	370	380	390	390	390	380	360	350	330	300	250				
	CNT					1	3	5	13	20	24	25	25	24	24	19	25	19	8	3	1				
10																									
foE	MED				130	140	160	190	220	240	250	260	270	270	265	260	240	230	210	170	150	140			
20	CNT				2	6	17	15	17	21	20	20	23	21	20	19	23	19	18	13	6	2			
	MED	30	28	29	34	27				26										11	22	28	35	32	30
foEs	CNT	19	18	17	17	16	20	19	19	23	23	24	24	24	23	20	26	25	25	23	23	22	18	18	20
30																									
M	MED	280	260	260	280	290	300	300	285	290	290	295	300	300	300	310	300	300	310	310	300	300	290	270	280
3000	CNT	12	14	16	15	18	22	20	22	22	26	26	25	24	26	21	26	24	23	21	18	17	10	10	12
F2	U Q	285	280	270	300	300	320	310	320	310	310	310	315	310	310	325	310	310	320	320	310	310	300	290	280
03	L Q	280	260	260	260	280	280	280	270	270	280	270	285	290	290	295	300	290	300	300	300	290	290	260	270
h'F2	MED						585	350	380	380	360	350	340	335	330	320	315	320	310	275	265				
	CNT						1	1	4	10	20	24	24	25	23	25	16	21	14	5	1	1			
	U Q							400	475	470	450	415	360	380	365	355	350	340	310						
04	L Q							310	310	320	340	305	310	310	310	295	295	295	290						
h'E	MED				E 140	E 120	E 120	110	110	110	110	110	110	110	110	110	110	115	U 110	115	U 110	110			
24	CNT				2	6	16	15	17	21	19	20	22	21	20	20	22	18	16	12	7	1			
h'F	MED	U 290	U 290	U 300	U 290	U 265	U 240	U 235	U 220	215	U 210	210	210	210	U 210	215	220	230	240	245	255	255	U 260	U 270	U 290
	CNT	18	17	19	16	19	22	20	22	23	26	26	25	23	25	23	28	25	23	23	22	19	19	16	20
	U Q	U 320	U 320	U 335	U 315	U 285	U 255	U 240	U 230	225	U 230	220	220	215	225	225	230	240	U 250	260	270	280	U 285	U 310	U 320
16	L Q	U 260	E 280	U 280	U 260	U 250	225	U 220	210	210	210	205	200	200	U 200	210	210	220	230	U 235	240	250	240	E 250	U 260
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

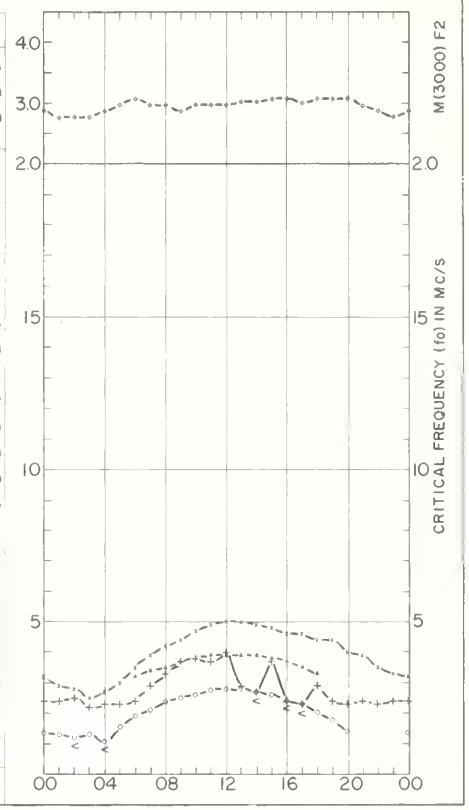


SODANKYLA
FINLAND

LAT. 67.4N LONG. 26.6E SWEEP 1.4 MC TO 22.0 MC IN 480 SEC TIME 30.0E

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	32	29	28	25	27	30	35	39	42	44	47	49	50	50	49	48	46	46	44	44	40	39	35	33
	CNT	21	18	22	21	19	25	26	25	26	30	29	29	28	29	29	28	30	30	29	28	25	21	21	18
	U Q	34	31	31	30	29	33	37	40	45	47	50	53	53	54	55	53	51	48	48	47	45	44	41	38
00	L Q	29	26	23	22	25	28	33	37	38	41	43	45	47	46	46	45	45	44	42	39	36	34	31	31
foF1	MED							320	340	350	370	380	390	390	390	390	380	370	350	330					
	CNT							4	11	21	27	29	27	28	27	27	18	13	5	1					
	U Q							330	350	360	380	390	400	400	400	400	390	370	350						
10	L Q							290	340	340	360	380	380	390	390	380	380	360	340						
foE	MED	135	130	E 120	130	E 107	155	190	210	237	250	260	275	280	280	270	260	240	230	202	177	140		E	E
	CNT	1	1	2	7	8	14	22	20	20	23	23	26	24	23	26	24	25	26	24	16	11	15	4	
foEs	MED	24	24	25	22	23	23	24	29	33	37	38	37	40	29	E 27	37	E 24	E 23	29	24	23	24	23	24
	CNT	30	26	27	28	23	24	25	27	27	29	29	29	28	29	30	29	30	30	30	28	29	27	26	28
	U Q	36	37	29	28	28	28	30	35	38	40	44	41	41	41	40	41	35	32	34	31	30	30	27	41
30	L Q	15	13	12	13	15	17	E 19	E 21	E 24	E 25	E 26	E 28	E 29	E 28	E 27	E 26	E 24	E 23	E 20	E 18	E 14	28	E 14	E 12
M	MED	290	278	280	280	290	300	310	300	300	290	300	300	300	305	305	310	310	303	310	310	310	298	290	280
3000	CNT	19	16	21	21	19	25	26	25	27	30	29	29	28	29	29	27	30	30	29	26	25	20	21	18
F2	U Q	295	290	287	290	300	305	320	315	320	310	310	310	310	318	315	320	320	315	315	310	320	305	307	290
03	L Q	275	270	268	275	280	293	300	285	290	280	282	285	283	297	292	300	300	300	300	300	295	290	288	275
h'F2																									
04																									
h'E	MED	140	150		135	123	122	115	115	110	110	110	110	110	110	110	115	110	115	115	115	130	130	110	
24	CNT	1	1		3	4	14	21	20	20	23	21	26	25	23	26	24	24	26	23	17	11	3	1	
h'F	MED	292	295	318	295	275	260	230	220	210	210	200	200	200	200	200	200	210	217	230	240	250	260	265	290
	CNT	24	22	24	24	20	25	26	26	27	29	29	28	28	29	29	28	30	30	29	28	27	25	24	23
	U Q	317	320	357	325	330	283	240	230	225	220	210	210	208	210	205	220	220	235	248	250	265	295	295	325
16	L Q	265	270	282	270	260	232	220	200	200	200	200	190	183	190	190	202	210	210	220	230	240	240	240	260
CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

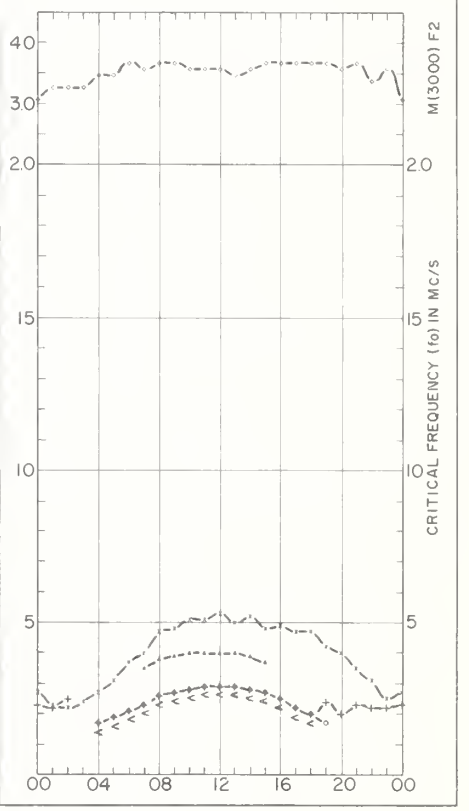


LULEA
SWEDEN

LAT. 65.6N LONG. 22.1E SWEEP 0.65 MC TO 25.0 MC IN 300 SEC TIME 15.0E

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	F 27	F 23	F 22	F 24	27	31	37	40	47	48	51	51	53	50	52	48	49	47	47	42	F 40	F 35	F 31	F 25
	CNT	12	7	12	11	16	13	11	10	9	8	10	14	10	13	8	13	12	14	15	16	15	12	9	9
00																									
foF1	MED								350	380	390	400	400	400	400	390	370								
	CNT								2	6	9	7	16	7	7	4	5								
10																									
foE	MED					170	190	210	230	260	270	280	290	290	290	280	270	250	220	200	170				
	CNT					3	8	10	16	15	17	14	16	12	12	8	15	14	15	12	3				
20																									
foEs	MED	J M 23	J M 22	M 25		E 17	E 19	E 21	E 23	E 26	E 27	E 28	E 29	E 29	E 29	E 28	E 27	E 25	E 22	E 20	J 24	J X 20	J M 23	J 22	J M 22
	CNT	10	5	1		3	9	9	14	16	17	14	19	14	13	9	15	13	15	10	6	8	4	8	7
30																									
M	MED	F 310	F 330	F 330	F 330	350	350	370	360	370	370	360	360	360	350	360	370	370	370	370	370	F 360	F 370	F 340	F 360
3000	CNT	11	7	12	11	16	13	11	10	9	8	10	14	10	13	8	13	12	14	16	17	13	12	9	8
F2																									
03																									
h'F2	MED								285	275	260	250	260	250	275	250	250								
	CNT								2	5	7	7	15	8	7	5	5								
04																									
h'E	MED					125	100	100	100	100	100	100	95	100	100	100	100	100	100	100	120				
	CNT					2	5	8	14	13	16	12	15	12	12	8	14	13	12	7	1				
24																									
h'F	MED	240	245	230	240	205	200	195	195	180	175	175	175	170	175	180	190	180	190	200	205	200	210	225	235
	CNT	13	10	13	11	10	15	15	16	20	19	16	18	12	12	9	17	14	18	22	22	20	19	17	14
16																									
CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

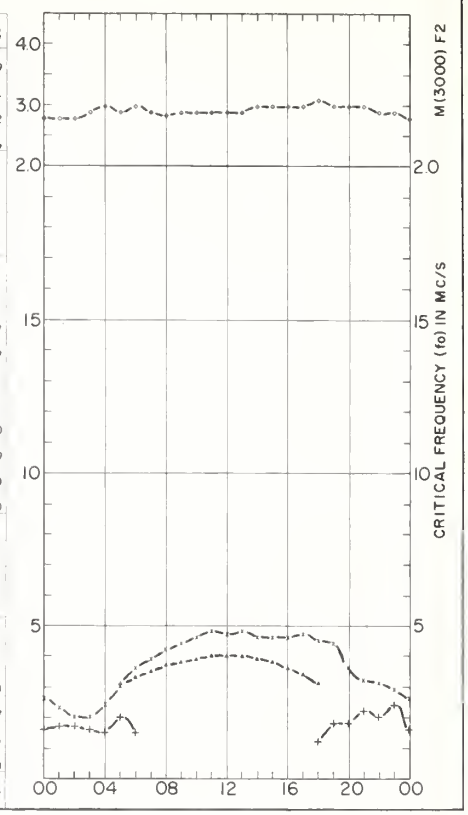


LYCKSELE
SWEDEN

LAT. 64.7N LONG. 18.8E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	26	23	20	20	24	30	36	39	42	44	46	48	47	48	46	46	46	47	45	44	36	32	31	29
	CNT	21	23	22	21	26	28	30	29	30	30	30	30	29	30	29	30	30	29	27	27	25	25	25	21
	U Q	28	26	25	23	26	33	38	42	44	48	51	52	54	53	55	53	50	50	50	46	44	38	34	32
00	L Q	21	18	17	18	22	30	33	36	37	42	43	45	45	45	45	45	45	44	42	38	32	29	26	24
foF1	MED						310	330	350	370	380	390	400	400	400	390	380	360	340	310					
	CNT						1	6	20	28	30	30	30	30	29	28	26	21	10	5					
10																									
foE																									
20																									
foEs	MED	16	17	17	16	15	20	15												12	18	18	22	20	24
	CNT	23	25	25	25	23	24	28	28	30	30	29	29	28	29	27	28	29	28	27	28	22	23	23	24
30																									
M	MED	280	280	280	290	300	290	300	290	285	290	290	290	290	290	300	300	300	300	310	300	300	300	290	290
3000	CNT	18	21	19	19	25	27	26	30	30	29	29	30	29	28	28	30	30	29	26	26	24	24	22	19
F2	U Q	290	285	280	300	300	300	310	300	290	300	305	310	310	305	310	310	310	310	310	310	300	310	300	300
03	L Q	270	270	270	270	290	290	280	230	250	270	270	280	280	280	290	290	290	290	300	290	290	280	280	280
h'F2	MED								475	375	385	350	350	340	340	340	340	310	320	290					
	CNT						1	5	16	25	30	28	30	29	28	28	25	19	8	4					
	U Q									650	420	455	400	380	385	360	345	335		290					
04	L Q							350	340	340	340	310	310	315	310	295	290	300	285	290					
h'E	MED			130	120	110	120	110	110	105	105	100	100	100	105	105	105	110	110	120	120	125	120	110	
24	CNT			1	3	6	11	2	4	29	28	28	26	24	25	23	22	23	22	14	6	7	2	1	
	MED	300	290	285	290	265	240	230	225	215	215	210	200	200	210	215	220	225	235	240	245	250	250	270	280
h'F	CNT	23	22	19	21	25	27	27	30	30	30	30	30	29	30	28	30	30	28	27	27	27	26	21	17
	U Q	330	350	300	300	290	250	235	235	230	230	220	210	210	220	230	230	230	240	245	260	260	270	290	305
16	L Q	270	270	270	270	250	230	220	210	200	200	200	195	190	200	210	210	215	230	240	240	240	240	240	240
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

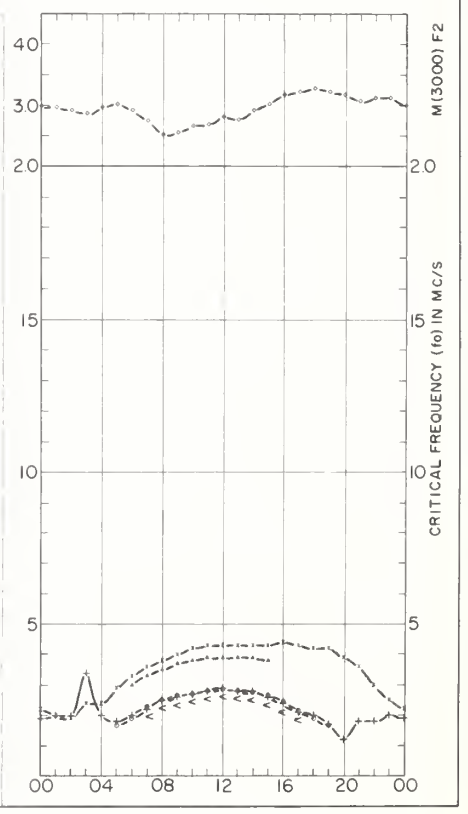


ANCHORAGE
ALASKA

LAT. 61.2N LONG. 149.9W SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 150.0W

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		U F	U F	U F	U F	U F																F	U F	U F	U F
	MED	22	20	19	24	24	29	33	36	38	40	42	43	43	43	43	43	44	43	42	42	39	36	30	25
foF2	CNT	23	24	18	13	22	25	25	23	25	26	27	24	27	27	27	25	27	27	26	27	25	27	23	24
		U F	U F	U F	U F	U F	F															F	F	U F	F
	U Q	25	24	22	26	27	32	35	39	40	43	44	44	46	46	45	46	45	47	45	43	40	40	38	30
		U F	U F	U F	U	U F	U F			E	E	E										F	U F	U F	U F
00	L Q	18	19	16	19	21	28	32	35	35	37	38	40	39	40	41	41	41	40	40	39	36	26	24	23
	MED							300	330	350	370	380	390	390	390	390	380								
foF1	CNT						3	8	17	21	26	27	23	27	27	26	16	4	2						
	U Q							310	345	360	380	390	400	400	400	400	385								
10	L Q							295	320	340	360	380	380	380	380	380	370								
foE	MED						U 165	U 188	U 228	U 250	U 265	U 270	U 280	285	280	275	265	245	215	188	U 165				
20	CNT						2	10	18	20	20	19	20	14	18	17	17	17	16	13	14	12	3	1	
					M					E	E	E	E	E	E	E	E	E	E	E					
	MED	19	20	20	34	20	18	20	22	25	26	27	28	29	28	28	26	24	21	20	17	12	18	18	20
foEs	CNT	13	18	19	19	26	24	22	19	24	24	24	24	24	25	24	23	21	18	20	21	18	11	12	10
				M	M	M			E	E	E	E						E	E				M		
	U Q	28	25	33	46	36	21	22	23	26	27	28	29	30	29	29	28	25	23	22	20	21	42	29	24
								E	E	E	E	E	E	E	E	E	E	E	E	E	E				
30	L Q	12	18	14	19	17	16	18	21	24	26	26	20	28	26	27	25	20	18	19	15	11	14	11	13
		U F	U F	U F	U	U F	U F															F	U F	U F	U F
M	MED	302	300	295	290	300	305	295	278	255	258	270	272	285	280	295	305	320	325	330	325	320	310	315	315
3000	CNT	20	17	15	9	17	23	23	22	25	26	26	24	25	25	27	25	27	27	26	27	25	23	22	21
		U F	U F	U F	U	U	F															F	U F		F
F2	U Q	318	308	300	298	308	315	320	310	278	285	285	292	308	310	315	325	330	340	335	335	325	320	325	322
		U	U	U F	U F	U F	F			G	G	G		G	G							F	U F	U F	U F
03	L Q	292	282	280	280	285	285	265	245				248	265		260	272	300	315	320	320	310	305	310	298
h'F2																									
04																									
h'E	MED					109	108	107	108	105	102	102	102	100	100	102	104	105	107	115	E 8 129				
24	CNT				1	7	14	22	20	25	24	23	24	24	24	24	22	21	18	17	16	4	1		
h'F																									
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

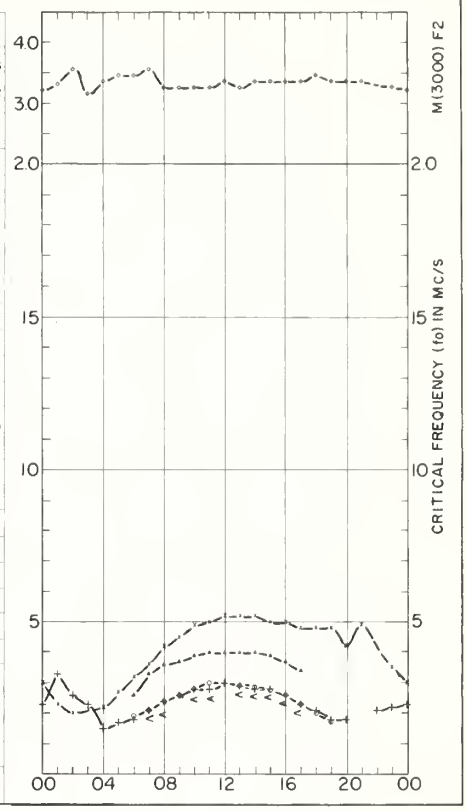


NURMIJARVI
FINLAND

LAT. 60.5N LONG. 24.6E SWEEP 1.0 MC TO 25.0 MC IN 60 SEC TIME 30.0E 1964 04 NURMIJARVI 30.0E

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	30 F	23 F	20	21 F	22 F	27	32	36	42	45	49	50	52	52	52	50	50	48	48	48	42	49		35
	CNT	4	4	1	1	2	14	24	21	26	24	28	30	28	28	29	29	29	30	24	12	8	3		2
	U Q	31	26				29	34	41	46	49	52	55	55	57	57	57	55	51	52	51	51	53		
	L Q	26	19				25	30	34	38	42	46	45	48	48	47	46	46	45	45	42	37	46		
foF1 10	MED							260	330	360	370	390	400	400	400	400	390	370	340 L						
	CNT							2	6	14	27	28	30	29	27	27	23	10	2						
	U Q								340	370	390	400	410	410	410	410	400	380							
	L Q								320	350	370	390	400	400	400	390	390	370							
foE 20	MED							190	210	240	260	280 R	300 R		290 R	285 R	275	260	230	200 R	170 F				
	CNT							3	6	2	1	3	1		2	2	2	2	2	1	1				
foEs 30	MED	23	33	26	23	15	17 U	18 E	21	24 E	26	28 E	28	30 E	29 E	28 E	28	26 E	23 E	21	18	18		21	22
	CNT	1	2	2	5	10	7	28 E	30	30	30	30	30	12 E	29 E	30 E	28 E	29 E	29	29	25	10		2	1
	U Q				24	22	18	19 E	22	25 E	27 E	31	30 E	34 E	29 E	28 E	28 E	26 E	25	23	21	20			
	L Q				20	15	15	17 E	21	24 E	26 E	28	30 E	29 E	29 E	28 E	28 E	26 E	22	20	17	16			
M 3000 F2 03	MED	325 F	335 F	360	320 F	340 F	350	350	360	330	330	330	330	340	330	340	340	340	340	350	340	340	340		330
	CNT	4	4	1	1	2	13	24	20	23	23	28	27	27	27	29	29	28	29	23	12	8	3		2
	U Q	335	345				360	360	360	360	350	350	350	350	350	350	350	360	360	350	350	350	350		
	L Q	315	330				335	340	340	310	310	320	320	320	320	330	320	330	330	340	340	335	335		
h'F2 04																									
h'E 24																									
h'F 16	MED	285	290	300	300	300	270	220	212	210	200	200	200	200	200	200	205	210	220	230	250	240	230	240	250
	CNT	28	24	24	27	27	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	27	28	30
	U Q	300	300	325	300	300	290	240	230	215	210	205	200	200	200	205	210	215	230	230	270	260	250	270	290
	L Q	280	280	280	290	280	250	220	205	200	200	200	200	200	200	200	200	200	210	210	230	230	230	220	230
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

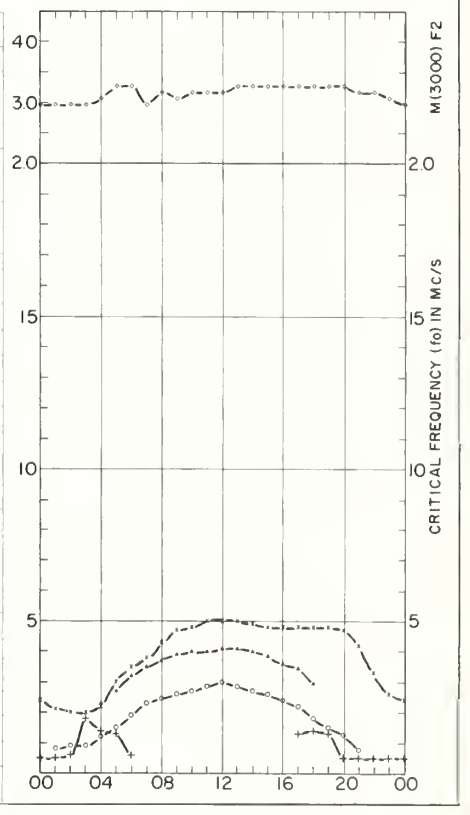


UPPSALA
SWEDEN

LAT. 59.8N LONG. 17.6E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E 1964 04 UPPSALA 15.0E

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	24	21	20	20	22	30	35	38	43	47	48	50	50	50	49	48	48	48	48 U	48 U	47	42	33	26
	CNT	27	25	27	25	27	30	30	30	28	29	28	30	30	29	30	30	30	30	30	28	27 U	26 U	29	27
	U Q	27	25	23	21	25	32	38	43	47	50	51	53	53	56	53	54	51	51	50	50	50	46	38	32
	L Q	20	18	17	18	20	27	32	36	38	43	44	46	47	46	46	45	45	45	45	42	43	35	30	23
foF1 10	MED					230	270	320	350	370	390	400	400	410	410	400	385	360	345	295					
	CNT					1	4	8	21	29	29	29	30	30	29	28	30	27	14	2					
foE 20	MED		80	90	90	120	150	190	230	245	260	270	285	300	285	270	260	240	220	180	150	125	75		
	CNT		3	4	7	14	29	29	30	29	27	25	26	26	28	26	28	28	30	28	21	6	2		
foEs 30	MED	5	5	6	18	14	13	6											13	14	13	5	5	5	5
	CNT	22	23	28	28	28	30	30	30	28	29	29	30	30	29	27	28	28	30	30	29	26	25	24	22
M 3000 F2 03	MED	300	300	300	300	310	330	330	300	320	310	320	320	320	330	330	330	330	330	330	330	330	320	320	310
	CNT	27	25	27	25	27	30	29	30	27	29	28	30	30	29	30	30	30	30	27	25	25	24	29	27
	U Q	310	305	300	300	320	330	330	330	330	330	330	330	330	330	330	330	330	340	330	340	330	330	330	320
	L Q	290	290	290	280	300	320	310			300	300	300	300	310	310	310	320	330	330	320	320	315	310	290
h'F2 04	MED						275	415	370	350	350	335	325	335	310	310	300	300	290	260					
	CNT					1	6	13	22	28	29	29	30	30	29	30	30	26	20	10					
	U Q										400	400	375	355	360	355	350	310	300	265					
	L Q						260	270	305	U 310	300	295	300	300	295	295	285	265	260	260					
h'E 24	MED			130	115	105	110	105	100	100	100	100	100	100	100	100	100	100	105	110	115	120	120		
	CNT			2	3	7	21	29	30	29	29	29	29	28	29	28	28	29	27	23	7	1	1		
h'F 16	MED	260 U	255 U	260 U	280 U	270	240	215	210	210	200	200	200	200	200	205	210	210	225	240	245	240	240	240	250
	CNT	23	24	23	23	28	30	30	30	29	28	28	30	26	29	29	30	30	30	30	30	29	27	27	26
	U Q	270 E	280 E	280 E	290 U	285 U	250	225	220	215	205	205	205	205	205	215	215	225	235	245	250	250	250	250	275 U
	L Q	250 E	250 E	250 U	260 U	255 U	225	205	205	200	200	200	195	200	195	200	205	210	210	215	240	235	235	225	235 U
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

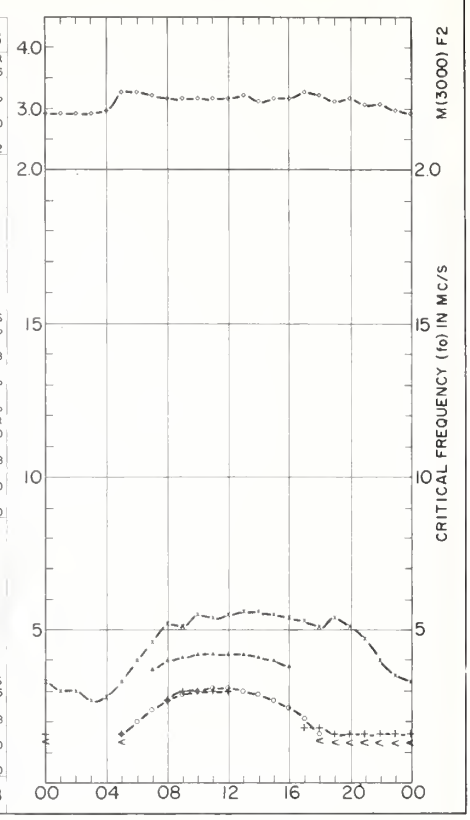


WARSAW
POLAND

LAT. 52.2N LONG. 21.2E SWEEP 1.0 MC TO 18.0 MC IN 20 SEC TIME 15.0E

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	R 33	30	30	27	28	33	40	R 46	R 52	R 51	R 55	R 54	R 55	R 56	R 56	R 55	R U 54	R 53	R 51	R 54	R 51	R 47	R 40	R 35
	CNT	24	26	24	26	26	26	27	26	22	28	25	25	26	27	27	28	28	28	29	28	26	27	28	26
	U Q	37	33	30	30	30	36	44	49	54	58	60	60	57	58	58	60	58	58	57	58	53	49	46	40
00	L Q	29	29	26	23	24	30	38	43	45	48	50	51	54	52	52	51	52	50	50	50	47	43	35	32
foF1	MEO								370	400	410	420	420	420	420	410	400	380							
	CNT							2	13	21	28	26	26	28	28	25	26	14	1						
	U Q								380	400	410	420	430	430	420	420	400	380							
10	L Q								340	390	400	400	420	420	420	400	400	370							
foE	MEO					E S 160	R 200	R 240		R 270	290	R 300	R 310	310	R 300	R 290	R 270	R 245	R 210	E S 160					
20	CNT					16	14	18		19	16	10	11	10	16	17	15	15	17	17					
foEs	MEO	E S 16	E	E	E	E E 16	S	G	G	27	30	30	30	30	G	G	G	G	18	18	E S 16	E S 16	E 16	E 16	E S 16
	CNT	25 E	26	26 E	26 E	25 E	25 G	27	27	25	29	27	27	28	27	28	28	28	29	30	30 E	30 E	30 E	29 E	28 E
	U Q	16 E	10	E	E	16 E	E	20 G	25 G	29 G	32 G	33 G	32 G	32 G	30 G	28 G	30 G	26 G	23 G	20 E	16 E	16 E	16 E	16 E	16 E
30	L Q	16 E				16 E														16	16 E	16 E	16 E	16 E	16 E
M 3000 F2	MEO	R 295	295	295	295	R 300	330	330	325	R 320	R 320	R 320	R 320	R 320	R 325	R 315	R 320	R 320	R 330	R 325	R 315	R 320	R 310	R 310	R 300
	CNT	20	23	22	23	22	22	23	16	15	20	10	14	16	11	15	17	16	13	15	13	12	18	23	18
	U Q	300	305	310	310	310	340	340	325	325	330	325	320	320	330	320	325	335	335	330	330	320	325	315	310
03	L Q	285	285	290	290	295	315	320	310	300	300	300	310	310	315	305	310	320	315	315	310	300	305	300	290
h'F2	MEO								315	305	310	305	330	315	310	310	300	280							
	CNT							2	13	21	28	26	26	27	28	25	26	15	2						
	U Q								370	360	355	345	350	330	330	320	325	300							
04	L Q								290	295	300	290	300	300	300	300	290	270							
h'E	MEO							117	111	107	107	105	105	104	105	105	105	109	B 117						
24	CNT						3	19	26	24	28	25	24	24	22	19	18	21	17	2					
h'F	MEO	E S 280	E 280	E 270	E 270	E E 260	250	230	230	210	210	200	200	200	205	220	220	230	240	250	E S 250	E S 250	E 250	E S 250	E 265
	CNT	25 E	26 E	26 E	26 E	26 E	26	27	27	25	29	26	27	28	28	27	28	27	28	30	30	29 E	28 E	28 E	28 E
	U Q	295 E	290 E	280 E	280 E	285 E	250	240	240	225	220	210	210	210	210	225	230	240	250	250	250	250 E	250 E	260 E	280 E
16	L Q	270 E	260 E	260 E	250 E	260 E	240	220	215	200	200	200	200	190	200	205	210	220	230	240	240	240 E	240 E	245 E	250 E
CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

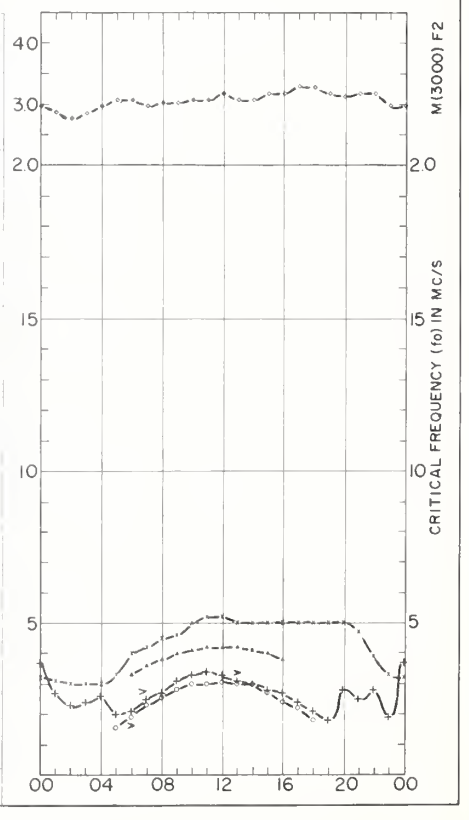


ADAK
ALASKA

LAT. 51.9N LONG. 176.6W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 180.0W

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	32	31	30	30	30	33	40	42	45	46	50	52	52	50	50	50	50	50	50	50	50	47	39	33
	CNT	28	27	29	26	26	29	28	28	29	30	28	28	28	29	30	30	29	28	30	28	29	30	29	27
	U Q	34	33	33	32	33	37	42	45	48	52	52	54	56	54	54	53	54	52	53	57	54	49	42	37
00	L Q	29	28	28	28	27	29	36	40	42	43	46	48	46	46	46	46	46	46	47	46	44	42	36	32
foF1	MEO								330	360	380	400	410	420	420	420	410	400	380						
	CNT								7	16	25	30	27	28	27	28	22	13	6	1					
	U Q								350	370	390	410	420	420	420	420	410	400	U L 390						
10	L Q								310	350	380	390	400	410	H 420	405	400	390	380						
foE	MEO							D 155	190	230	255	282	300	300	305	300	H 298	270	240	220	U S 180				
20	CNT							5	19	21	19	22	16	16	11	10	10	16	23	25	7	1			
foEs	MEO	M 37	27	M 23	M 24	26	20	O 21	25	27	31	33	34	O 33	31	30	28	27	24	21	18	M 28	M 25	M 28	19
	CNT	9	9	8	10	14	21	29	30	30	30	29	30	28	28	29	30	29	29	30	28	20	13	11	14
	U Q	M 51	M 41	M 32	M 36	M 35	M 31	22	27	30	35	38	37	36	33	34	34	34	O 30	29	M 40	M 38	M 41	M 46	M 33
30	L Q	O 13	E O 14	16	15	22	E 16	18	E 23	E 25	30	O 32	32	O 31	28	O 28	25	24	O 22	18	E 16	14	14	17	E
M 3000 F2	MEO	300	290	280	288	300	310	310	300	305	305	310	310	320	310	310	320	320	332	330	320	315	320	320	300
	CNT	28	26	27	26	26	28	28	28	28	29	27	28	28	29	30	30	29	28	30	28	29	29	27	27
	U Q	308	300	295	300	300	320	330	320	320	320	330	315	335	320	330	330	335	340	340	335	320	335	340	315
03	L Q	282	280	270	280	285	288	300	270	288	278	290	295	298	292	295	310	310	318	320	320	302	302	300	290
h'F2	MEO								350	424	370	370	345	354	325	348	332	318	300	278	258				
	CNT								9	18	23	30	27	28	27	28	26	22	18	11	8				
	U Q								490	530	430	430	410	382	385	374	440	339	330	298	270				
04	L Q								315	345	338	327	315	321	300	327	300	283	270	262	253				
h'E	MEO							136	124	115	114	110	110	110	112	110	110	110	E 110	E 118	E 135				
24	CNT							9	24	26	28	30	29	28	27	28	28	28	28	26	14	4			
h'F	MEO	290	295	E 300	290	290	276	248	236	223	225	E 225	207	200	209	E 216	225	238	251	257	E 255	255	248	250	268
	CNT	30 E	29 E	30	28	29 E	29	28	30	30	30	27	28	27	28	30	29	29 E	28	29	28	29	30	29 E	28
	U Q	310 E	314	320	305	313 E	298	266	245	240	235	235	213	216 H	220	235 H	248	258 E	260	272	260	272	270	268 E	285
16	L Q	268 E	279	280	281	272 E	256	238	220	215	210	208	200	194 H	200	200 H	212	224	240	246	244	244	236 E	235	248
CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



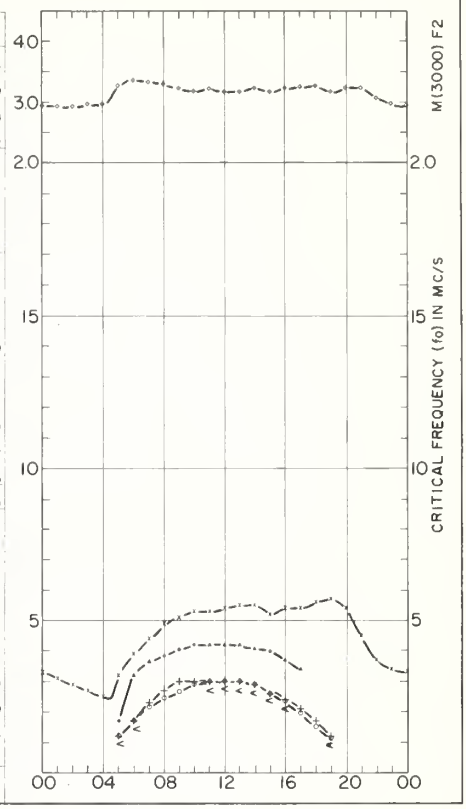
DOURBES
BELGIUM

LAT. 50.1N LONG. 4.6E SWEEP 1.0 MC TO 20.0 MC IN 180 SEC TIME 0.0

1964 04 DOURBES 0.0

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	33	31	29	27	25	32	39	44	49	51	53	53	54	55	55	52	54	54	56	57	54	45	37	34
	CNT	29	29	29	29	29	29	27	26	27	30	29	27	29	28	29	29	29	29	29	29	28	29	29	29
	U Q	35	33	32	30	28	34	41	46	53	55	55	57	56	58	60	58	58	30	60	62	60	52	42	38
00	L Q	30	28	25	22	22	29	35	41	44	47	48	51	49	50	50	50	50	50	50	54	48	39	35	32
foF1	MED						170	320	365	385	405	420	420	420	420	408	400	370	340						
	CNT						1	5	21	26	28	28	29	29	29	28	24	20	7						
	U Q							340	370	390	410	420	425	428	425	410	400	378	350						
10	L Q							310	360	380	400	412	412	415	410	400	395	365	335						
foE	MED						120	170	215	245	265	290	300	300	300	290	260	235	195	150	U 8 112				
20	CNT						28	28	24	23	22	19	24	23	25	28	27	29	29	21	5				
foEs	MED	E	E	E	E	E E G E G 12		17	23	27	30	30	E G 30	E G E G E G E G 30		30	29	E G E G 24	21	17	E E 12	E	E	E	E
	CNT	29 E	29 E	29 E	29 E	29 E E G E G		28	27	27	30	30	30	30 E G E G E G E G		30	29	29	29	29	29	29 E E	29 E	29 E	29 E
	U Q					12		17	25	28	31	31	32	30	30	29	26	26	23	18	14	12	11		
30	L Q	E	E	E	E	E	G E G E G		17	E G E G E G E G 24		26	E G E G 29	E G E G E G E G 30		30	E G E G 26	E G E G E G 24		20	15	E	E	E	E
M	MED	297	296	296	300	300	330	339	336	333	326	321	325	320	320	326	320	326	328	329	320	326	326	309	300
3000	CNT	29	29	29	29	29	29	27	25	26	30	28	27	28	26	29	29	29	29	29	29	28	29	29	29
F2	U Q	303	303	300	306	309	343	349	342	340	338	340	334	329	322	332	333	336	334	336	328	332	333	322	306
03	L Q	290	289	292	292	292	310	314	322	320	306	318	312	308	314	310	314	318	323	322	316	315	316	300	290
h'F2	MED						310	U G 325	330	320	324	340	334	351	336	330	325	310	290	280					
	CNT						2	8	21	25	30	28	27	28	26	29	28	27	24	9					
	U Q							510	380	337	U G 388	366	370	368	360	362	350	330	300	295					
04	L Q							295	302	308	305	302	315	330	320	318	302	300	278	270					
h'E	MED						E 136	121	117	115	114	114	115	114	114	114	114	116	121	131	O E 138				
24	CNT						28	28	27	27	30	30	30	30	30	30	29	29	29	27	9				
h'F	MED	280	285	280	280	278	260	240	230	220	216	220	215	212	222	225	230	238	248	255	255	250	240	252	270
	CNT	29	29	29	29	29	29	28	27	27	30	30	30	30	30	30	29	29	29	29	29	29	29	29	29
	U Q	298	300	300	295	298	270	248	245	230	230	230	230	230	240	235	240	240	250	260	262	258	250	275	288
16	L Q	270	278	270	268	260	245	240	220	210	210	210	200	210	210	220	225	230	240	250	250	240	240	242	260
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



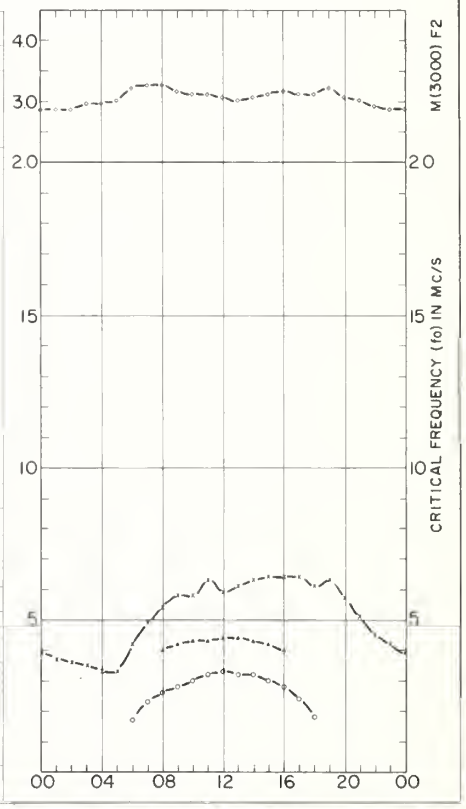
ROME
ITALY

LAT. 41.8N LONG. 12.5E SWEEP 1.4 MC TO 15.0 MC IN 300 SEC TIME 15.0E

1964 04 ROME 15.0E

APRIL 1964

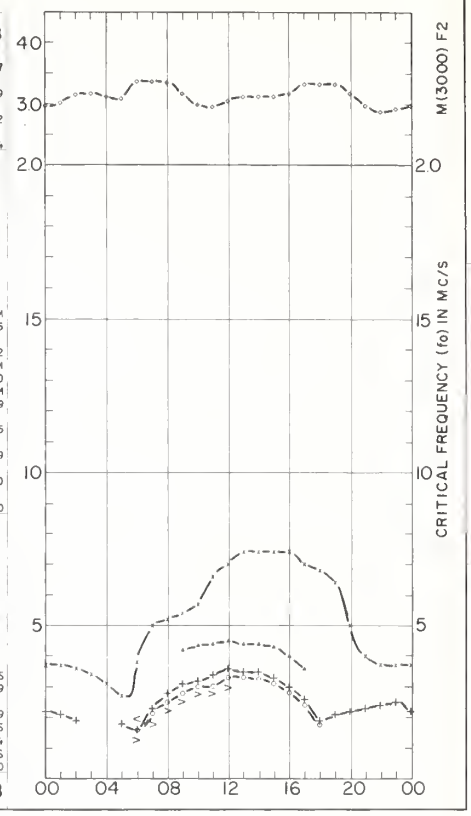
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	39	37	36	35	33	33	42	49	54	58	58	63	59	61	63	64	64	64	61	U 63	57	51	45	U 42
	CNT	23	27	26	27	26	29	27	26	25	23	30	29	30	30	30	30	27	26	22	21	21	25	27	19
	U Q	41	40	39	37	35	35	44	52	56	61	63	68	64	65	66	67	69	68	65	U 69	60	56	51	U 44
00	L Q	36	35	35	34	31	30	38	46	50	53	55	56	57	58	58	60	60	57	58	U 60	51	47	41	U 38
foF1	MED									400	420	430	430	440	440	430	420	400							
	CNT								3	9	17	23	26	26	27	24	17	9							
	U Q									400	U 420	440	440	440	450	440	420	410							
10	L Q									390	U 420	430	430	440	430	430	420	390							
foE	MED							170	230	260	280	300	320	330	320	320	300	280	240	180					
20	CNT							16	27	28	28	22	18	18	21	24	28	28	28	22					
foEs	MED																								
	CNT	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	29	30	30
30																									
M	MED	290	290	290	300	300	305	325	330	330	320	315	315	310	305	310	315	320	315	315	325	310	305	295	U 290
3000	CNT	21	26	26	26	26	28	26	26	24	23	28	29	30	30	30	30	27	26	18	19	19	23	27	17
F2	U Q	295	295	295	305	310	310	340	340	335	330	320	320	320	310	315	320	325	325	325	340	325	310	305	U 295
03	L Q	280	280	280	290	285	295	315	320	320	305	300	300	295	295	300	305	310	310	310	310	300	300	290	U 280
h'F2	MED									300	300	310	310	310	320	310	305	290							
	CNT								2	8	16	23	26	26	27	26	18	9	1						
	U Q									315	330	340	320	340	330	350	310	320							
04	L Q									285	275	300	290	300	300	300	290	290							
h'E	MED							145	120	110	110	110	110	110	110	110	110	110	120	130					
24	CNT							14	30	29	30	30	29	30	30	30	30	30	30	25					
h'F	MED	290	290	290	270	270	260	240	230	210	210	210	200	205	200	210	225	240	240	250	240	240	250	260	290
	CNT	28	30	30	30	30	29	30	30	29	29	29	29	30	29	29	30	26	26	28	28	27	26	29	28
	U Q	300	300	300	290	280	290	250	240	225	220	220	210	210	215	220	240	250	240	250	250	250	260	285	300
16	L Q	270	290	270	260	260	250	240	220	210	210	200	200	200	200	200	210	230	240	240	240	240	240	245	255
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



GRAND BAHAMA I. LAT. 26.6N LONG. 78.2W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W 1964 04 GRAND BAHAMA I. 75.0W

APRIL 1964

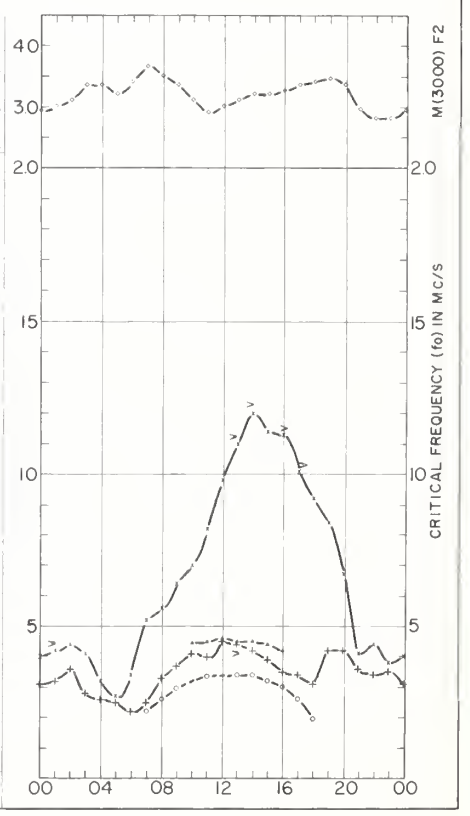
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MEO	37	37	36	34	31	27	38	50	52	54	57	66	70	74	74	74	74	70	68	64	50	40	37	37
		CNT	29	29	30	30	30	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	29
		U Q	41	40	40	38	34	32	40	52	56	59	65	77	85	90	86	83	78	75	75	68	58	43	40	42
00		L Q	34	34	33	30	26	25	36	45	47	49	51	53	58	62	64	63	63	60	58	58	44	36	34	34
foF1		MEO										420	435	440	450	440	440	430	400	360						
		CNT								3	3	13	22	28	29	30	29	27	16	7						
		U Q										430	440	450	450	450	445	U L 430	400	370						
10		L Q										405	430	430	440	430	430	420	390	360						
foE		MEO							O 0		O A	O A	O A	O A	O A											
20		CNT							158	212	250	278	300	302	330	330	325	310	280	240	175					
foEs		MEO	M 22	M 21	M 19		18	E 16	23		28	31	32	34	36	35	35	33	30	26	19	21	M 22	M 23	M 24	M 25
		CNT	11	10	9	4	4	6	28	30	30	30	30	30	30	30	30	30	30	30	30	21	13	15	15	12
		U Q	M 25	M 22	M 24		M 19	18	24		29	35	34	35	37	36	37	35	32	30	23	M 26	M 31	M 28	M 31	M 30
30		L Q	M 19	M 18	16		13	E 16	21		26	29	30	33	35	35	34	32	29	25	18	E 15	M 18	M 19	M 19	M 19
M 3000 F2		MEO	300	305	318	320	315	312	340	340	338	320	302	298	308	315	315	315	320	335	335	335	320	300	290	295
		CNT	29	29	30	30	29	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	29
		U Q	308	310	320	335	322	328	345	355	345	330	310	310	315	320	320	325	335	340	345	345	335	318	300	300
03		L Q	295	292	305	320	305	300	330	330	320	305	280	280	300	295	300	305	315	320	330	330	305	290	285	290
h'F2		MEO								252	275	307	340	346	318	306	301	294	278	262	240					
		CNT							3	26	29	29	30	30	30	30	30	30	30	30	27					
		U Q								269	310	344	410	410	340	342	328	314	301	288	261					
04		L Q								243	258	282	319	303	298	283	283	279	262	250	232					
h'E		MEO							U S E 120	S 112	110	E 106	E 106	E 106	107	107	E A E 109	E 110	E 110	E S 112	E S 120					
24		CNT							13	30	30	30	30	30	29	30	30	30	30	30	15					
h'F		MEO	E S 274	E S 272	E S 250	E S 240	E S 242	S 250	238	220	209	200	196	H E 193	E 202	E 208	212	213	E 219	224	E 230	220	E S 218	S 250	S 282	S 289
		CNT	29	30	30	30	29	30	30	30	30	30	30	29	30	30	30	30	30	29	29	30	30	29	30	29
		U Q	E S 281	E S 280	E S 260	E S 248	E S 266	S 270	252	H 226	E 219	H 205	H 207	H 208	H 223	H 223	H 229	220	E 229	E 238	E 240	E S 230	E S 232	S 279	S 300	S 294
16		L Q	E S 268	E S 261	E S 248	E S 229	E S 228	S 247	227	H 203	H 201	H 193	H 190	H 184	H 190	H 195	H 203	209	E 211	E 219	E 228	E S 213	E S 209	S 230	S 274	S 280
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



OKINAWA I. LAT. 26.3N LONG. 127.8E SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 135.0E 1964 04 OKINAWA I. 135.0E

APRIL 1964

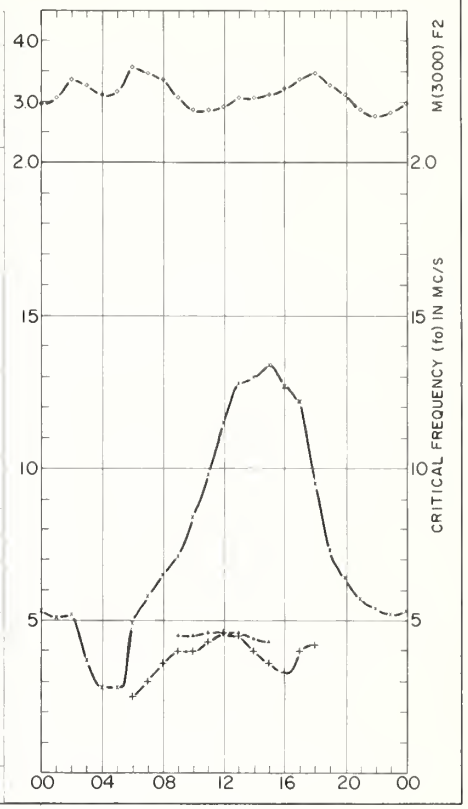
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MEO	O 40	42	44	41	32	27	34	52	56	64	70	82	98	O 0 110	120	114	O 0 113	101	92	84	67	41	44	38
		CNT	14	18	16	24	22	24	27	28	30	28	29	30	30	29 S	28	27	24	23	19 O S	20	21	19	17	11 O S
		U Q	45 S	45	56	46	36	30	37	56	61	70	75	88	102	123	132	130	123	116	96	90	80	49	50	42
00		L Q	37	38	39	34	28	24	30	50	55	58	64	75	90	102	110	108	105	92	85	80	60	36	40	35
foF1		MEO											445	450	460	450	450	440	420							
		CNT										4	16	23	20	17	15	17	15	4						
		U Q											455	460	460	460 A	460	445	420							
10		L Q											430	450	450	450 A	450	430	410							
foE		MEO								220	U R 260	U 295		U 335	U	340	340	320	300	260	195					
20		CNT								11	7	6	4	7	4	7	7	17	21	14	5					
foEs		MEO	M 31	M 32	M 36	M 28	M 26	M 25	22	25	33	37	M 41	40	45	O 44	42	39	35	34	M 31	M 42	M 42	M 36	M 34	M 35
		CNT	24	20	15	20	19	18	24	29	30	29	28	29	29	30	30	29	29	29	29	28	28	28	26	22
		U Q	M 44	M 37	M 41	M 36	M 32	M 32	M 30	28	35	M 40	M 48	M 48	M 50	M 52	M 55	M 50	M 48	M 49	M 54	M 58	M 50	M 44	M 42	M 41
30		L Q	M 25	M 25	M 30	M 24	M 22	M 21	15	23	30	36	38	39	40	42	36	35	E 30	28	24	M 24	M 24	M 30	M 28	M 24
M 3000 F2		MEO	298	305	315	340	340	325	345	370	355	340	315	295	305	315	325	325	330	340	345	350	340	300	285	285
		CNT	12	16	14	21	21	22	27	26	29	27	29	30	29	23	22	25	20	18	15	19	20	13	13	10 U S
		U Q	300	330	330	368	350	350	365	380	368	350	330	305	312	320	330	335	342	350	350	360	368	330	295	300
03		L Q	280	295	310	322	318	310	330	360	340	320	298	285	290	305	320	320	320	335	335	330	330	288	280	280
h'F2		MEO								226	249	270	309	325	E 322	304	289	277	264	249	237					
		CNT								6	16	26	29	29	30	30	30	29	30	29	17					
		U Q								235	264	290	322	352	340	319	300	290	280	260	252					
04		L Q								219	230	259	290	306	305	299	280	262	252	240	230					
h'E		MEO								112	108	105	105	105	105	104	105	105	E 110	110	116					
24		CNT								24	25	19	21	19	21	21	29	28	28	27	21					
h'F		MEO	E 300	E 274	250	E 228	235	E S 250	239	220	E 218	215	200	E A 200	209	E A E A 256	E A 225	225	E 216	221	234	221	212	E A E A 266	E A S 300	307
		CNT	27	30	30	30	27	26	28	29	28	27	25	27	23	20	20	25	22	22	28	27	25	28	27	30
		U Q	E A 318	E A 300	E 273	E 250	E 260	E S 275	250	225	E 221	E A 228	216	E A 228	E A 248	C A 292	E A 250	E A 243	E A 227	E A 235	E A 240	E A 242	E 230	E A 300	E A 315	E A 325
16		L Q	E 280	E 255	239	204	214	E 220	E 224	216	E 210	205	190	180	179	E 200	186	211	210	211	E 229	E 215	E 208	E A 230	E 284	E S 290
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



TAIPEI(TAIWAN)
CHINA — LAT. 25.0N LONG.121.5E — SWEEP 1.0 MC TO 25.0 MC IN 27 SEC — TIME 120.0E — 1964 04 — TAIPEI — 120.0E

APRIL 1964

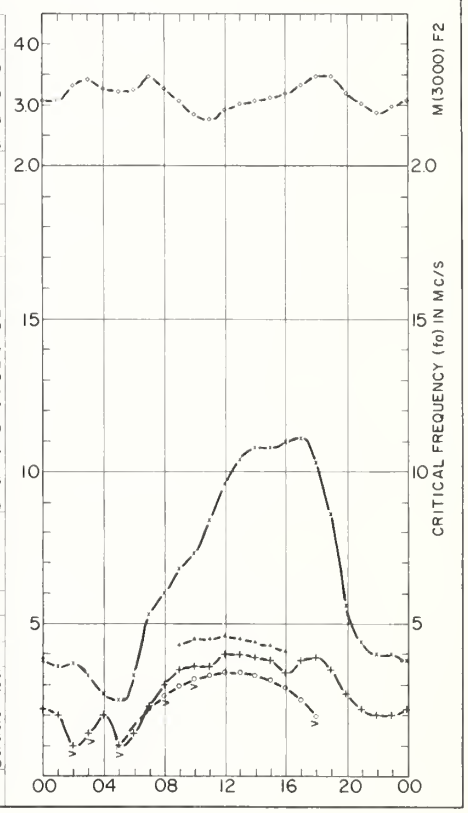
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	51	52	37	28	28	49	58	65	71	84	98	115	128	130	134	127	122	95	73	64	57	54	52
	CNT	23	22	24	22	20	16	30	30	29	29	29	28	28	28	27	26	28	28	24	27	26	20	19	22
	U Q	63	63	64	47	35	32	50	60	72	78	88	106	126	138	145	140	144	126	118	89	70	65	58	62
00	L Q	44	42	40	28	26	25	45	53	60	66	74	91	106	120	126	122	114	104	88	63	55	53	47	46
foF1	MED									450	450	460		460	460	440	430								
	CNT									8	11	12		11	16	7									
10																									
foE																									
20																									
foEs	MED							25	30	36	40	40	43	46	45	40	36	33	40	42					
	CNT	30	30	30	30	30	30	14	27	26	27	24	26	24	23	21	27	28	23	23	29	30	30	30	30
30																									
M	MED	300	310	340	330	315	320	360	350	340	310	290	290	295	310	310	315	325	340	350	330	315	290	280	285
3000	CNT	19	19	20	17	15	5	28	30	29	28	28	24	21	23	21	21	21	14	18	20	23	13	11	15
F2	U Q	310	330	370	360	340	350	370	360	350	320	300	300	305	310	320	330	330	350	355	340	340	320	285	290
03	L Q	290	295	320	300	300	315	355	340	330	290	280	285	295	300	305	315	320	335	330	315	290	280	270	275
h'F2	MED								245	270	300	330	330	330	300	280	265	260	240						
	CNT								12	23	26	22	27	28	29	28	27	29	11						
04																									
h'E	MED									111	111	113	113	116		111	115	117							
	CNT									1	5	5	3	2		1	2	1							
24																									
h'F	MED	290	270	230	240	255	250	230	230	220	210	210	205	215	220	215	225	225	240	230	225	240	295	330	310
	CNT	27	28	28	25	20	7	29	30	22	14	13	12	8	10	13	16	16	29	30	29	25	18	17	24
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



MAUI
HAWAII — LAT. 20.8N LONG.156.5W — SWEEP 0.25 MC TO 20.0 MC IN 27 SEC — TIME 150.0W — 1964 04 — MAUI — 150.0W

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	36	37	33	27	25	33	53	60	68	73	84	96	104	108	108	110	111	103	86	56	44	40	40
	CNT	30	29	28	29	29	29	30	29	30	30	30	30	30	30	30	30	30	30	29	29	30	30	30	30
	U Q	43	42	42	36	32	30	34	56	64	71	78	90	105	110	116	116	117	116	110	101	64	53	47	43
00	L Q	35	34	34	28	24	22	30	50	57	61	66	75	88	97	100	103	102	102	90	64	49	39	37	35
foF1	MED									430	450	450		460	450	440	430	410							
	CNT									1	9	21	26	25	27	27	23	13							
	U Q									445	455	460		460	460	450	440	420							
10	L Q									420	440	450		450	450	440	430	410							
foE	MED						90		220	262	295	318	330	340	340	330	315	290	250	195					
20	CNT						1	5	2	21	22	15	12	10	8	14	14	13	19	14	7				
foEs	MED	22	20	10	14	20	10	14	23	30	35	36	36	40	40	39	38	34	38	39	35	27	22	20	20
	CNT	27	27	24	22	22	26	24	30	30	30	30	30	30	30	30	30	30	30	30	29	29	30	27	27
	U Q	25	23	22	22	24	18	16	25	33	39	41	42	52	42	47	45	45	52	47	45	38	30	31	30
30	L Q	13	6	6	6	6	6	11	22	26	31	33	34	37	36	36	35	33	31	24	24	22	17	6	6
M	MED	310	310	335	345	330	325	328	350	330	310	288	280	295	305	310	315	322	335	350	350	322	305	290	300
3000	CNT	25	24	27	26	27	29	30	29	30	29	30	30	30	29	30	30	30	29	29	29	30	30	29	27
F2	U Q	315	318	350	360	340	350	345	370	345	330	300	290	300	312	320	320	330	345	362	360	340	310	300	305
03	L Q	292	300	315	320	305	308	315	335	325	292	260	270	285	295	300	305	315	325	338	338	310	295	288	290
h'F2	MED								240	280	292	330	358	337	315	290	291	277	253	234					
	CNT								9	17	27	29	29	30	30	30	30	30	29	24					
	U Q								245	288	324	398	389	360	332	310	307	284	266	244					
04	L Q								232	260	282	309	335	321	296	282	277	265	248	225					
h'E	MED						157	131	112	109	108	108	107	108	108	107	108	107	110	124					
24	CNT					2	7	5	27	29	29	29	27	21	23	26	22	22	18	10					
h'F	MED	280	272	230	230	245	248	250	227	213	207	198	193	203	215	219	213	224	227	230	219	217	250	282	292
	CNT	26	29	30	28	27	28	28	28	29	28	27	24	25	23	20	23	21	16	17	27	24	25	25	26
	U Q	295	280	260	254	269	266	256	235	223	220	203	204	221	230	226	229	228	234	242	229	234	270	300	315
16	L Q	260	249	230	210	223	235	238	216	202	200	190	187	186	197	201	195	220	222	222	210	208	236	254	270
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

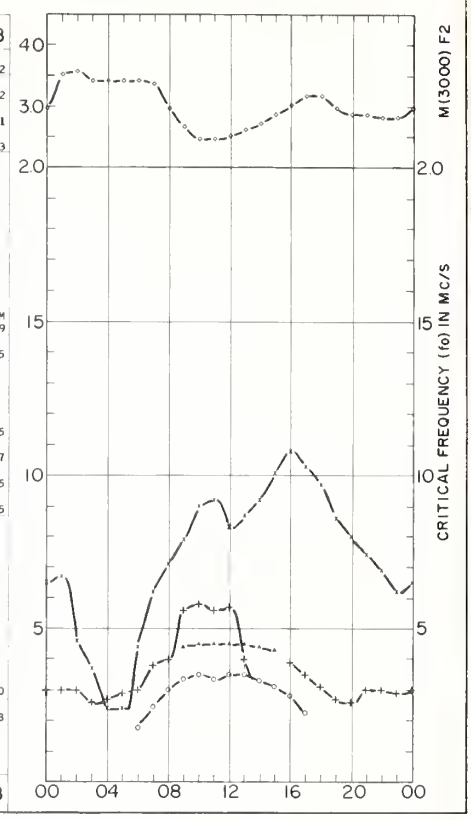


MANILA
LUZON

LAT. 14.7N LONG. 121.1E SWEEP 0.25 MC TO 20.0 MC IN 30 SEC TIME 120.0E

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	65	67	46	37	24	24	44	62	71	79	90	92	83	87	92	101	108	103	97	86	80	74	69	62
	CNT	17	24	28	23	24	19	27	28	28	25	13	5	16	24	28	28	28	27	26	28	27	25	23	22
	U Q	70	78	58	42	34	30	47	66	78	84	92	100	87	91	100	108	114	110	103	90	84	79	75	71
00	L Q	54	59	38	31	22	20	41	58	68	75	82	84	79	84	90	94	96	99	90	82	72	65	62	53
foF1	MED									U L 440	450	450		450	450	440	U L 430								
	CNT									3	10	21		18	19	12	1								
10																									
foE	MED							175	245	U S 300	U S 335	U S 350	U S 335	U 350	U 350	U S 330	U S 310	U 280	225						
20	CNT							3	16	8	5	6	2	2	4	8	11	17	10						
foEs	MED	M 30	M 30	M 30	M 26	M 27	M 29	M 30	M 38	M 40	M 56	M 58	M 56	M 57	M 40			M 39	M 35	M 31	M 27	M 26	M 30	M 30	M 29
	CNT	25	26	23	26	27	27	28	28	26	27	28	26	27	28	29	28	27	24	23	24	24	24	26	25
30																									
M	MED	300	355	360	345	345	345	345	340	300	270	250	250	255	265	275	290	305	320	320	300	290	290	285	285
3000	CNT	15	21	21	18	20	8	25	27	28	24	11	1	12	22	28	28	29	27	25	26	25	24	20	17
F2	U Q	320	365	370	360	360	360	360	345	320	285	255		260	270	290	300	320	335	330	315	300	295	295	295
03	L Q	285	320	340	330	310	335	340	330	280	260	245		250	255	260	280	295	305	300	290	280	285	285	275
h'F2	MED								245	290	335	350	370	365	355	345	320	290	260						
	CNT								2	11	19	18	25	26	27	28	28	24	19						
04																									
h'E	MED							E S 127	113	108	U C 107	107	109	108	107	109	111	111	114						
24	CNT							3	12	16	10	10	14	14	16	22	22	22	14						
h'F	MED	290	245	U A 210	U A 220	U A 230	230	245	230	220	210	200	U A 200	190	195	190	U A 200	220	230	245	245	275	285	300	310
	CNT	26	26	24	24	16	7	26	25	14	19	17	20	20	22	23	19	23	20	28	28	25	25	27	28
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

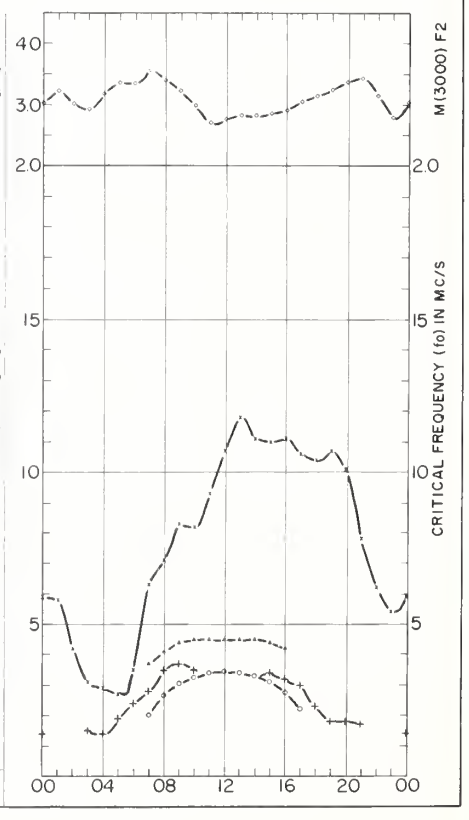


LWIRO
CONGO

LAT. 2.2S LONG. 28.8E SWEEP 1.25 MC TO 20.0 MC IN 180 SEC TIME 30.0E

APRIL 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	59	58	42	31	29	27	35	63	71	83	82	93	107	118	111	110	111	106	104	107	101	78	62	U 54
	CNT	27	28	28	28	27	22	28	27	27	28	27	27	28	29	29	29	28	29	28	29	29	28	28	25
	U Q	69	66	49	41	34	30	36	67	78	90	96	99	113	127	122	116	114	117	118	115	114	92	77	
00	L Q	49	46	33	25	21	20	33	59	65	73	78	81	98	107	107	104	99	96	98	96	89	63	49	
foF1	MED								U 370	U 410	440	450	450	450	450	U 450	U 440	U 420	L						
	CNT								1	12	23	20	19	20	19	12	12	5							
	U Q											450	460	460	460										
10	L Q											450	450	450	450										
foE	MED							E 200		265	305	325	340	345	340	330	310	275	220						
20	CNT							6	25	25	27	26	26	26	26	25	24	24	13	2					
foEs	MED	14		E	E 15	14	19	24	28	35	37	35	G	G	G	G	34	32	30	23	18	18	17	E	E
	CNT	16	11	13	19	21	22	27	23	23	24	14	8	28	29	29	29	28	29	28	29	29	29	29	29
	U Q	19 E	17 E	16 E	21 E	22 E	25	33	36	40	41	46 G	34 G	37 G	41 G	40 G	36 G	35 G	38	28	25	23 U E	19 E	19 E	19 E
30	L Q						14	18	26	32	34								25	18	18				
M	MED	306	326	305	296	321	339	338	360	343	326	302	274	280	286	286	289	294	308	317	327	340	346	317	282
3000	CNT	27	24	24	22	21	19	25	27	27	28	27	27	28	29	28	29	28	29	28	29	29	27	26	24
F2	U Q	336	345	329	307	329	356	343	365	349	341	333	286	292	294	295	294	303	314	326	335	350	358	342	304
03	L Q	293	313	293	289	310	331	329	349	334	319	296	269	272	276	279	281	285	299	306	315	329	335	300	254
h'F2	MED								240	265	280	285	350	350	325	315	310	300	275	255					
	CNT								24	26	28	26	24	27	28	28	29	27	29	2					
	U Q								245	275	290	305	375	375	345	340	335	320	290						
04	L Q								235	260	265	270	320	330	315	300	295	285	260						
h'E	MED								115	113	111	109	110	111	109	111	111	111	113						
24	CNT								19	14	12	7	10	11	7	9	13	10	12						
h'F	MED	240	220	220	U 251	U 246	U 235	235	230	215	215	205	195	195	190	185	190	220	240	245	230	215	200	205	225
	CNT	29	29	29	28	24	19	26	24	17	19	19	23	26	22	19	22	15	19	27	29	29	29	29	28
	U Q	252	230	245				245	230	225	215	205	200	200	190	195	210	225	245	250	240	225	205	215	247
16	L Q	220	207	202	240	235	225	230	225	215	210	200	195	190	185	180	185	205	230	240	225	205	195	195	210
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



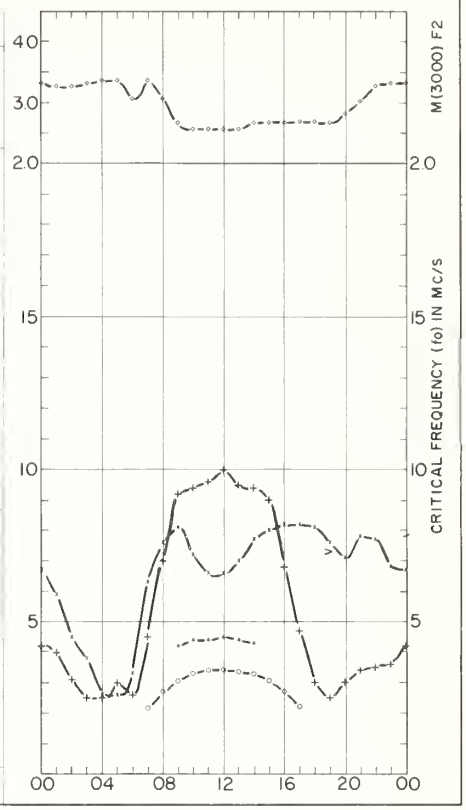
HUANCAYO
PERU

LAT. 12.0S LONG. 75.3W SWEEP 1.0 MC TO 25.0 MC IN 108 SEC TIME 75.0W

1964 04 HUANCAYO 75.0W

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	67	59	45	38	26	26	33	63	76	81	W 72	W 66	W 66	W 70	W 77	W 80	82	82	81	0 76	71	78	77	68
	CNT	21	22	24	24	24	23	29	29	29	29	28	28	28	28	28	28	28	28	28	28	23	18	19	18
	U Q	72	63	52	43	38	29	38	66	80	87	W 80	W 72	W 73	W 78	W 82	W 88	86	86	85	79	80	85	83	76
	L Q	60	47	39	29	22	17	30	61	74	W 72	W 67	W 64	W 61	W 65	W 72	W 75	76	78	76	70	70	71	70	63
foF1 10	MED										420	440	440	450	440	430									
	CNT										8	22	24	26	28	23	3								
	U Q										430	440	450	450	450	430									
	L Q										420	430	440	440	440	440									
foE 20	MED								215	U 270	U 305	U 330	U 340	U 342	U 335	U 328	U 305	U 270	U 220						
	CNT							1	24	26	29	28	28	28	28	28	28	27	26	1					
foEs 30	MED	M 42	M 40	M 31	M 25	M 25	M 30	M 26	M 45	M 70	M 92	M 94	M 96	M 100	M 95	M 94	M 90	M 68	M 47	M 30	M 25	M 30	M 34	M 35	M 36
	CNT	13	12	13	8	8	9	18	29	29	28	25	26	27	28	27	27	26	27	26	18	21	18	16	12
	U Q	M 45	M 44	M 42	M 36	M 32	M 40	M 35	M 47	M 72	M 94	M 95	M 102	M 105	M 102	M 95	M 91	M 70	M 49	M 47	M 45	M 40	M 42	M 36	M 42
	L Q	M 23	M 37	M 23	M 22	M 22	M 22	M 23	M 22	M 46	M 90	M 92	M 93	M 94	M 94	M 93	M 76	M 67	M 47	M 24	M 22	M 25	M 30	M 30	M 28
M 3000 F2 03	MED	335	330	330	335	340	340	310	340	310	270	W 260	W 260	W 260	W 260	W 270	W 270	270	272	272	270	285	305	330	335
	CNT	20	22	22	22	21	21	29	29	29	28	25	26	27	28	27	27	26	26	28	27	20	16	17	15
	U Q	345	345	340	340	350	340	328	340	325	290	W 270	W 265	W 265	W 265	W 275	W 275	280	285	285	280	295	315	342	340
	L Q	328	330	320	320	328	330	310	332	290	255	W 250	W 255	W 255	W 255	W 260	W 265	265	260	262	250	278	300	320	330
h'F2 04																									
h'E 24	MED								115	105	103	100	100	100	100	100	101	103	110						
	CNT								24	27	29	28	28	28	28	27	27	26	23	1					
h'F 16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



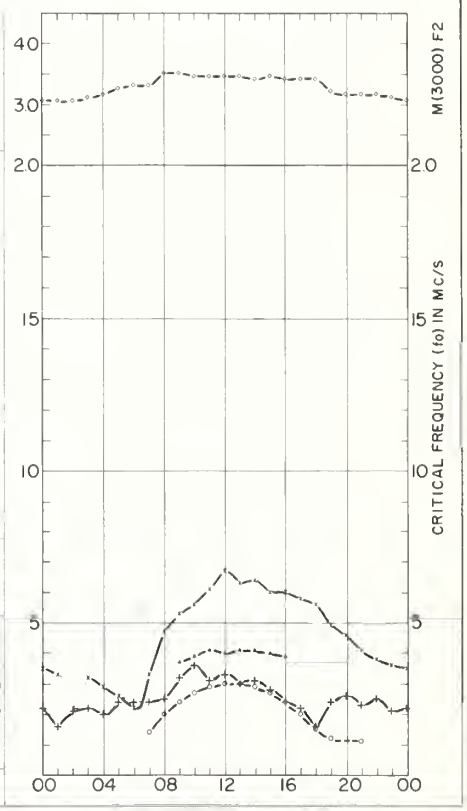
GODLEY HEAD
NEW ZEALAND

LAT. 43.6S LONG. 172.8E SWEEP 1.0 MC TO 22.0 MC IN 7 SEC TIME 180.0E

1964 04 GODLEY HEAD 180.0E

APRIL 1964

CHAR.		HR. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	35	33	22	32	29	26	22	33	47	53	56	61	67	63	64	60	60	58	56	49	46	41	38	36
	CNT	25	23	22	21	22	21	22	28	30	27	28	28	27	28	26	27	29	29	30	30	26	25	24	24
foF1 10	MED									U 370	U 390	U 410	U 400	U 410	U 410	U 400	U 390								
	CNT									4	15	23	21	17	11	3	1								
foE 20	MED	E	E	E	E	E	E	E	140	200	240	270	290	300	300	290	270	240	200	150	J S 120	J S 110	E	E	
	CNT	4	7	7	6	10	9	10	26	27	27	27	27	28	28	26	25	27	24	17	1	1	3	4	
foEs 30	MED	22	16	21	22	20	24	24	24	25	32	36	31	33	30	31	28	24	22	16	24	26	23	25	21
	CNT	30	29	30	30	30	30	30	30	30	29	29	28	28	28	26	27	30	29	30	30	30	30	30	30
M 3000 F2 03	MED	310	310	310	315	320	330	335	335	355	355	350	350	350	350	345	350	345	345	345	325	320	320	320	315
	CNT	25	23	22	21	22	21	19	28	27	26	27	27	27	27	26	27	29	29	30	28	26	25	23	24
h'F2 04	MED									240	250	250	260	250	260	260	260	250	240						
	CNT									10	25	25	28	27	28	25	25	28	9						
h'E 24	MED									110	105	105	100	100	100	100	105	105	110						
	CNT									21	24	27	24	26	23	21	21	22	15						
h'F 16	MED	270	260	260	260	260	250	250	240	230	220	200	200	200	200	210	220	230	240	220	240	240	250	260	260
	CNT	30	30	29	28	28	22	14	30	30	27	28	28	28	27	26	27	28	27	29	27	29	29	28	30
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

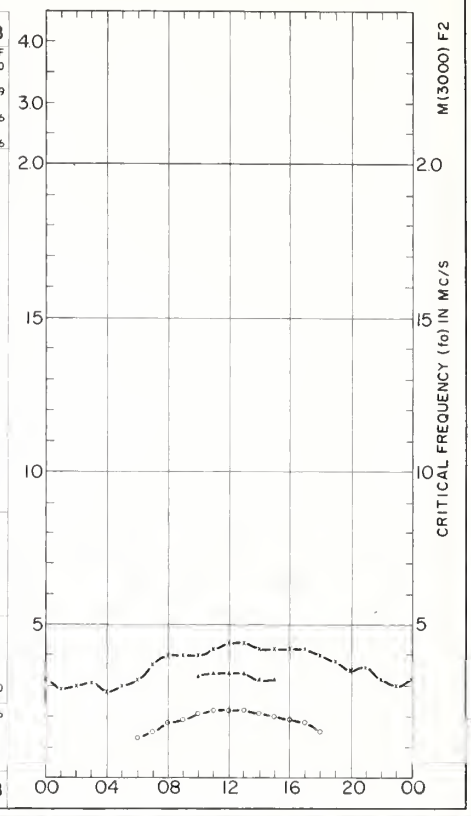


RESOLUTE BAY
CANADA

LAT. 74.7N LONG. 94.9W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 90.0W 1964 03 RESOLUTE 90.0W

MARCH 1964

CHAR		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
			F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
	MEO		32	29	30	31	28	30	32	37	40	40	40	42	44	44	42	42	42	42	40	38	35	36	32	30
foF2	CNT		28	29	29	24	26	27	27	27	28	28	28	28	28	29	29	29	28	28	27	28	26	26	25	29
	U Q		40	38	35	32	35	35	37	42	44	44	45	48	52	48	49	46	48	44	43	42	40	40	39	36
00	L Q		27	25	26	26	26	27	27	32	36	37	36	38	40	40	38	38	38	37	36	36	32	32	28	26
	MEO											U 330	L 340	U	U 340	L 340	L 320	L 320	L							
foF1	CNT											2	7	8	10	12	9	6	3							
10																										
foE	MEO								130	150	180	190	210	220	220	220	210	200	190	180	150					
20	CNT							3	13	21	26	26	28	24	23	24	24	25	24	19	15	4	1	1		
foEs																										
30																										
M	MEO																									
3000 F2	CNT											2	1							1						1
03																										
	MEO										U 270	320	310	300	300	300	310	295	290	U 290						
h'F2	CNT									1	6	12	16	20	18	24	23	20	17	8	1					
04																										
h'E																										
24																										
	MEO		245	250	240	240	245	250	245	250	240	230	225	220	220	220	220	220	230	230	245	245	250	250	240	250
h'F	CNT		25	28	25	25	28	27	27	28	28	28	28	27	26	27	26	26	28	28	27	28	27	25	25	26
16																										
CHAR		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

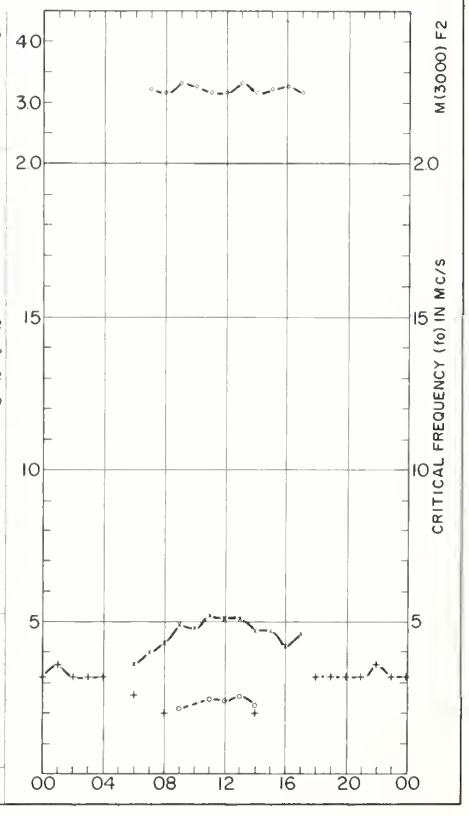


TROMSO
NORWAY

LAT. 69.7N LONG. 19.0E SWEEP 0.7 MC TO 25.0 MC IN 300 SEC TIME 15.0E 1964 03 TROMSO 15.0E

MARCH 1964

CHAR		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	MEO								36	40	43	49	48	52	51	51	47	47	42	46						
foF2	CNT		2		1	1	2		5	12	16	14	10	16	19	19	16	19	11	8	3	3		1		
	U Q								43	43	45	54	51	54	54	56	52	52	49	51						
00	L Q								28	28	41	47	46	46	45	47	44	43	41	41						
foF1																										
10																										
foE	MEO											215		245	240	255	225									
20	CNT							1		2 G	2 G	5 G	4 G	6 G	5 G	6 G	5 G	3 G	2 G	3 G						
	MEO		32	36	32	32	32		26		20						20				32	32	32	32	36	32
foEs	CNT		10	12	15	13	5	2	7	9	14	13	13 G	15	18	17 G	22	19	25	21	16	17	15	17	18	16
	U Q		40	43	40	41	40		30 G	23 G	26 G	24 G	26 G	28 G	23 G	G	29 G	27 G	30 G	32 G	36	37	32	44	40	32
30	L Q		30	32	31	28	26														24	29	26	32	22	29
M	MEO									325	320	335	330	320	320	335	320	325	330	320						
3000 F2	CNT								3	9	13	12	8	13	17	15	15	17	9	8	3	1	1	1		
	U Q									340	330	350	335	335	335	340	335	335	335	330						
03	L Q									320	310	320	315	315	310	310	310	320	315	320						
h'F2																										
04																										
h'E	MEO											125	120	115	115	115	125	120	125	125						
24	CNT								1	3	4	7	9	10	11	14	8	10	13	7	1					
	MEO						280	250	245		335	230	220	200	210	220	220	235	235	245	245	240	240			
h'F	CNT		2	1		1	1	5	11	19	17	15	12	14	15	20	17	19	23	24	20	12	7	4	3	2
	U Q						290	270	255		250	235	240	220	220	225	225	240	245	255	250	250	255			
16	L Q						250	250	235		220	200	215	200	200	200	200	225	230	240	240	235	240			
CHAR		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



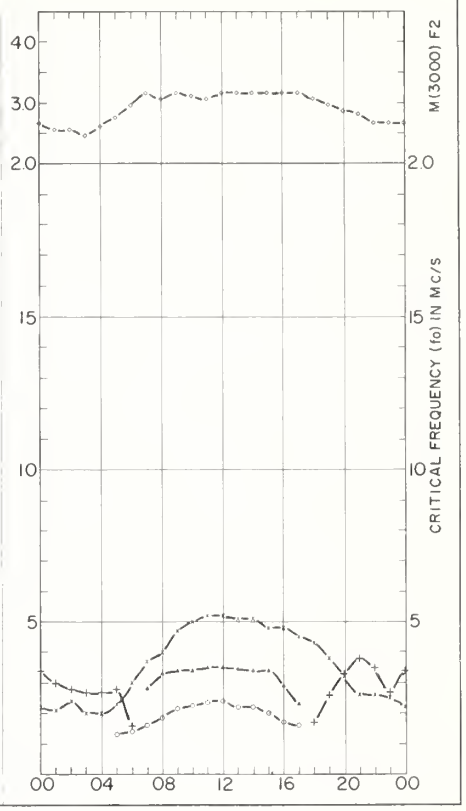
KIRUNA
SWEDEN

LAT. 67.8N LONG. 20.4E SWEEP 0.8 MC TO 15.0 MC IN 30 SEC TIME 15.0E

1964 03 KIRUNA 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	22	21	24	20	20	23	30	37	40	47	50	52	52	51	51	48	48	45	43	38	32	26	26	25
	CNT	11	9	10	9	8	15	21	24	24	25	26	27	26	27	28	28	28	23	19	15	15	16	15	17
	U Q	26	24	27	25	22	28	34	40	44	50	53	54	55	55	54	54	52	52	48	47	45	34	30	28
00	L Q	17	18	17	16	18	21	26	34	38	43	45	48	48	48	46	44	43	39	38	32	26	22	21	22
foF1	MED								280	330	340	340	350	350	345	340	340	290	230						
	CNT								3	10	19	22	19	23	20	17	12	2	1						
10																									
foE	MED							130	140	160	185	215	225	235	240	220	220	200	170	160					
20	CNT							3	7	15	18	18	18	18	20	19	22	23	17	13	1				
foEs	MED	34	30	28	27	27	28	16													17	26	33	38	35	27
	CNT	20	22	21	20	15	18	17	19	22	20	22	22	22	23	25	25	25	28	27	20	19	20	23	23
30																									
M	MED	270	260	260	250	265	280	300	320	310	320	315	310	320	320	320	320	320	320	310	300	290	285	270	270
3000	CNT	11	9	10	9	8	15	21	24	23	25	26	26	26	27	28	28	28	23	19	14	14	16	14	17
F2	U Q	290	270	280	270	280	300	310	320	320	330	330	330	330	330	335	330	330	320	320	320	300	300	300	280
03	L Q	250	250	250	240	245	260	295	305	290	300	300	300	310	320	310	310	310	310	300	290	280	275	250	255
h'F2	MED								260	275	275	280	290	270	270	255	260	260	245						
	CNT								2	10	17	24	19	24	22	17	14	4	1						
	U Q									295	300	320	320	300	290	285	285	265							
04	L Q									245	250	260	255	260	245	245	240	250							
h'E	MED							E	E	E	U	E	U			U	E	E	E						
								120	125	120	110	115	110	110	110	110	120	120	140						
24	CNT							2	7	14	19	18	18	18	20	18	22	21	16	13					
	MED	U	U	U	U	U		U			U	U					U						U	U	U
		305	315	315	300	305	280	260	240	230	220	220	215	220	220	225	220	240	235	245	245	265	270	295	310
h'F	CNT	19	18	17	15	13	17	22	24	24	24	26	27	24	27	27	30	29	27	25	23	20	18	18	19
	U Q	U	U	U	U	U	U	U				U				U	U					U	U	U	
		340	340	370	365	345	310	295	260	235	235	230	230	230	230	230	240	250	250	255	265	285	290	330	330
		E	E	E	E	E	U	U	U	U	U	U				U							U	U	U
16	L Q	305	310	305	325	290	260	240	230	220	210	210	200	210	210	210	210	230	225	230	230	245	230	250	275
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



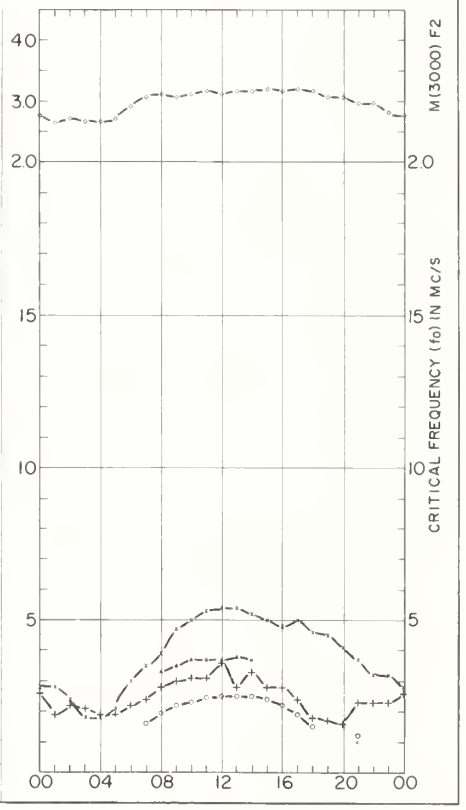
SODANKYLA
FINLAND

LAT. 67.4N LONG. 26.6E SWEEP 1.4 MC TO 22.0 MC IN 480 SEC TIME 30.0E

1964 03 SODANKYLA 30.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
				F	F															F					F
	MED	28	28	24	18	18	21	30	35	39	47	50	53	54	54	52	50	48	50	46	45	41	37	32	32
foF2	CNT	14	5	6	4	4	13	16	21	25	29	26	30	30	28	27	28	28	25	22	19	13	10	9	9
	U Q	29	33	34	25	21	27	32	38	45	52	53	58	57	58	58	56	54	54	53	48	50	49	41	35
			E		E	E																			
00	L Q	26	15	15	12	11	19	28	30	37	42	44	46	48	48	48	47	45	45	41	38	37	28	30	25
	MED									330	350	370	370	370	380	370									
foF1	CNT									1	3	9	11	10	7	3									
	U Q										350	370	380	380	380	370									
10	L Q										340	350	360	350	360	360									
	MED					E	E	E													E	E	E		
foE									160	193	220	230	245	250	250	250	240	220	190	150			120		
20	CNT					1	6	12	15	18	18	22	24	25	23	23	24	24	19	18	19	5	2		
	MED	26	19	22	21	19	19	22	24	28	30	31	31	36	28	33	28	28	24	18	17	16	23	23	23
foEs	CNT	27	29	28	28	28	27	26	24	27	29	29	30	30	29	29	31	30	30	30	28	31	31	29	29
	U Q	37	26	28	24	25	27	28	28	32	35	38	35	40	40	37	37	34	30	28	25	26	28	35	34
		E	E		E	E	E		E			E	E	E	E	E	E	E	E	E		E	E	E	E
30	L Q			14	11			13	16	19	23	23	24	25	25	25	24	22	19	15	12				12
				F	F	F																			F
M	MED	280	268	275	270	270	275	295	310	315	310	315	320	315	320	320	323	320	323	320	310	310	300	300	285
3000	CNT	13	4	5	3	3	12	16	21	25	29	26	30	29	28	27	28	28	24	22	18	12	10	9	9
F2	U Q	290	270	285	283	277	288	310	320	325	320	325	330	328	328	330	330	330	330	325	320	313	310	305	308
03	L Q	270	257	262	262	270	265	290	300	303	300	300	305	303	310	315	310	312	312	315	305	295	295	285	275
h'F2																									
04																									
h'E	MED							120	120	115	115	115	115	110	113	115	115	115	120	120	130	130		150	
24	CNT							1	5	11	17	19	19	22	22	22	23	24	22	17	14	3		1	
	MED	305	310	310	315	310	300	260	235	225	210	200	200	200	210	210	210	220	225	225	230	230	255	260	295
h'F	CNT	22	25	22	18	19	19	23	24	28	29	29	30	29	29	29	29	31	29	27	27	26	24	19	22
	U Q	340	345	330	350	360	350	300	245	230	225	212	210	212	215	220	215	230	230	235	240	270	280	310	320
16	L Q	280	285	295	300	300	265	240	228	213	200	193	190	190	193	200	200	200	215	210	220	225	232	235	260
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



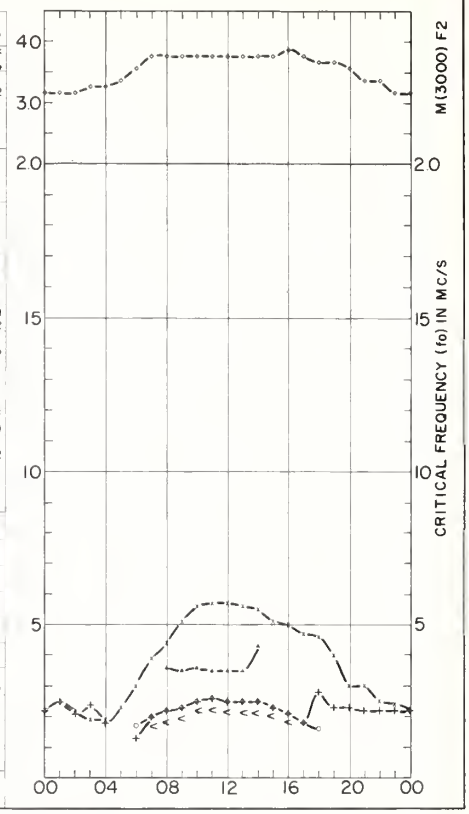
LULEA
SWEDEN

LAT. 65.6N LONG. 22.1E SWEEP 0.65 MC TO 25.0 MC IN 300 SEC TIME 15.0E

1964 03 LULEA 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	F 22	F 25	F U 22	F 19	F 19	F 23	30	39	44	51	56	57	57	56	55	51	50	47	46	40	F 30	F 30	F 25	F 24
	CNT	10	8	5	7	6	15	16	21	22	20	19	19	20	21	21	25	22	23	18	14	9	13	11	12
foF1 10	MED									U L 360	L 350	L 360	350	350	L 350	L 430									
	CNT									1	5	5	7	5	3	1									
foE 20	MED							170	200	220	230	250	260	250	250	250	230	210	180	U B 160					
	CNT							4	11	21	17	20	14	18	15	11	15	15	9	1					
foEs 30	MED	J M 22	J X 25	J 21	J M 24	J X 18		E 13	G 20	E G 22	E G 23	E G 25	E G 26	E G 25	E G 25	E G 25	E G 23	E G 21		J X 18	J 28	J 23	J 23	J X 22	J X 22	J M 22
	CNT	7	5	4	1	1		2	8	16	15	19	12	16	16	13	14	11	12	5	6	6	9	8	6
M 3000 F2 03	MED	F 320	F 320	F U 320	F 330	F 330	F 340	360	380	380	380	380	380	380	380	380	380	390	380	370	370	F 360	F 340	F 340	F 320
	CNT	10	8	5	7	6	15	16	21	22	20	19	18	18	21	21	25	22	23	18	14	9	13	11	12
h'F2 04	MED									225	245	225	220	225	230	230									
	CNT									1	6	5	7	7	4	3									
h'E 24	MED							100	100	100	100	100	100	100	100	100	100	100	100						
	CNT							7	16	15	19	12	16	15	11	15	9	6							
h'F 16	MED	250	250	260	250	240	230	200	200	190	180	175	175	180	180	180	190	195	200	195	200	210	225	250	255
	CNT	18	13	11	11	9	18	21	25	26	25	20	20	20	21	18	25	24	25	23	27	22	22	20	22
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



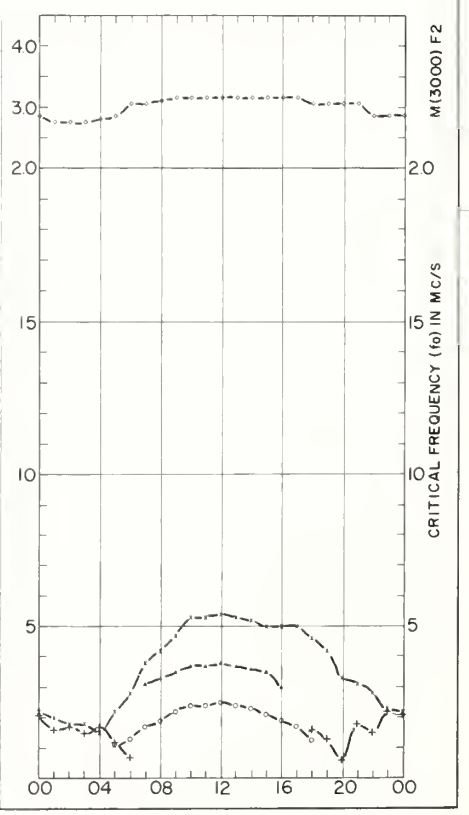
LYCKSELE
SWEDEN

LAT. 64.7N LONG. 18.8E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

1964 03 LYCKSELE 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	22	20	18	18	15	22	28	38	42	47	53	53	54	53	52	50	50	50	46	42	33	31	28	23
	CNT	20	23	21	24	24	28	29	30	30	30	31	30	30	30	30	31	30	29	25	26	25	23	24	21
	U Q	28	24	22	20	18	24	34	40	48	54	54	57	57	59	57	55	54	53	52	50	45	35	30	28
	L Q	18	15	14	12	12	16	25	35	40	43	46	48	51	49	48	50	45	45	44	32	29	27	25	19
foF1 10	MED								310	330	350	370	370	380	370	360	350	300							
	CNT								3	10	24	27	27	29	25	19	10	3							
foE 20	MED							110	130	170	190	220	240	240	250	240	230	210	190	170	125				
	CNT							4	14	24	29	26	28	26	26	25	25	26	21	18	8				
foEs 30	MED	21	16	17	15	17	12	7												16	13	6	18	15	22
	CNT	20	25	20	19	17	16	20	27	29	29	29	28	29	27	28	26	26	27	23	19	21	21	22	18
M 3000 F2 03	MED	290	280	280	280	285	290	310	310	315	320	320	320	320	320	320	320	320	320	310	310	310	310	290	290
	CNT	19	20	19	23	20	25	27	30	30	30	31	30	30	30	30	31	30	28	24	24	20	23	22	21
	U Q	300	295	290	290	290	300	320	320	330	330	330	330	330	330	330	330	330	320	310	310	310	310	300	300
	L Q	280	270	270	270	280	280	300	310	300	300	310	310	310	310	310	310	310	310	310	310	300	290	280	275
h'F2 04	MED								260	320	290	275	280	270	275	250	250	250							
	CNT								3	8	21	27	24	26	21	18	8	3							
	U Q								280	350	340	320	320	300	290	290	265	255							
	L Q								260	250	255	250	250	250	250	245	240	245							
h'E 24	MED							125	120	110	110	U 105	110	100	100	100	U 100	110	110	120	125				
	CNT							2	9	15	19	18	20	18	20	17	16	13	12	10	4				
h'F 16	MED	295	300	300	300	U 290	U 280	250	235	230	210	210	200	205	215	215	225	235	235	240	235	245	250	U 270	290
	CNT	20	21	18	21	18	U 24	28	30	30	29	31	30	31	29	28	31	29	29	29	27	26	U 23	23	21
	U Q	310	330	315	310	330	300	275	240	235	225	225	215	215	230	220	235	240	240	250	240	250	280	310	310
	L Q	270	U 285	U 290	270	270	U 255	240	230	205	200	200	200	200	205	205	215	225	225	230	225	235	240	U 250	250
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

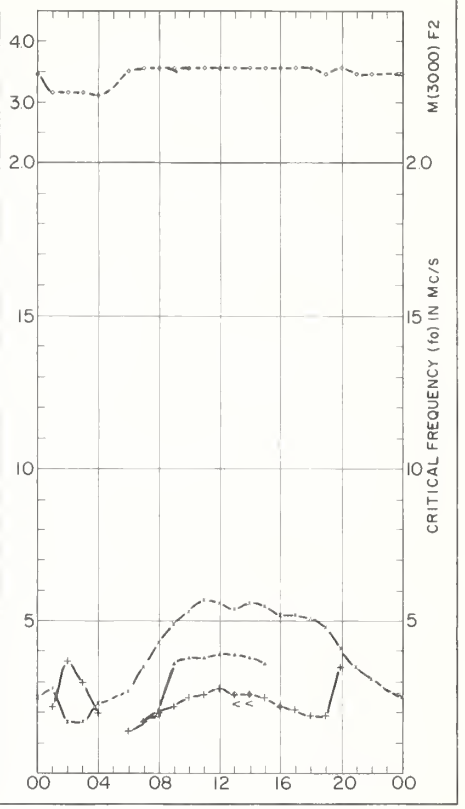


NURMIJARVI
FINLAND

LAT. 60.5N LONG. 24.6E SWEEP 1.0 MC TO 25.0 MC IN 60 SEC TIME 30.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	25	28	F 17	17	F 23		27	35	43	49	53	57	56	54	56	55	52	52	51	48	41	35	31	
	CNT	1	2	1	3	2		6	20	27	30	28	28	28	26	29	30	27	25	15	6	3	5	3	
	U Q				21			30	38	47	54	57	61	61	60	60	58	57	54	53	53	45	39	33	
00	L Q				16			24	29	38	43	48	51	49	53	52	51	50	49	47	46	39	29	27	
foF1	MED									210	360	380	380	390	390	380	360								
	CNT									1	4	7	14	14	12	8	1								
	U Q										360	380	390	400	400	390									
10	L Q										350	370	370	380	370 R	350									
foE	MED								170	190					260	260		220							
20	CNT								1	3					2 E	1 R		2							
foEs	MED		22	37	30	20		14	17	20	22	25	26	28 E	26 R	26 E	25	22	21	19	19	35			
	CNT		1	2	3	2		1	14	29	20	22	15	8 E	31 R	31 E	12	30	23	16	5	1			
	U Q				32				19	21	24	27	28	30 E	26 R	26 E	26	24 E	22	20	25				
30	L Q				23				17	19	22	24	25	26 E	26 R	26 E	22	22	20	16	17				
M	MED	350	320	F 320	320	F 315		355	360	360	360	360	360	360	360	360	360	360	360	360	350	360	350	350	
3000	CNT	1	2	1	3	2		6	19	27	28	26	28	26	25	29	30	27	24	16	6	3	5	3	
F2	U Q				320			360	360	370	365	370	370	370	370	370	365	370	368	365	350	360	360	360	
03	L Q				315			330	360	360	350	350	350	350	355	350	360	360	350	355	350	355	340	350	
h'F2																									
04																									
h'E																									
24																									
h'F	MED	300	300	290	298	300	295	270	220	215	200	205	200	200	200	200	205	210	220	220	220	220	230	275	300
	CNT	13	15	19	18	19	10	20	31	31	31	31	31	31	31	31	31	31	31	31	31	30	27	22	18
	U Q	300	310	300	300	320	300	280	240	230	215	205	205	205	205	205	220	220	230	230	230	230	260	290	300
16	L Q	280	290	280	290	280	290	235	220	205	200	200	200	200	200	200	205	205	210	215	215	220	220	240	280
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

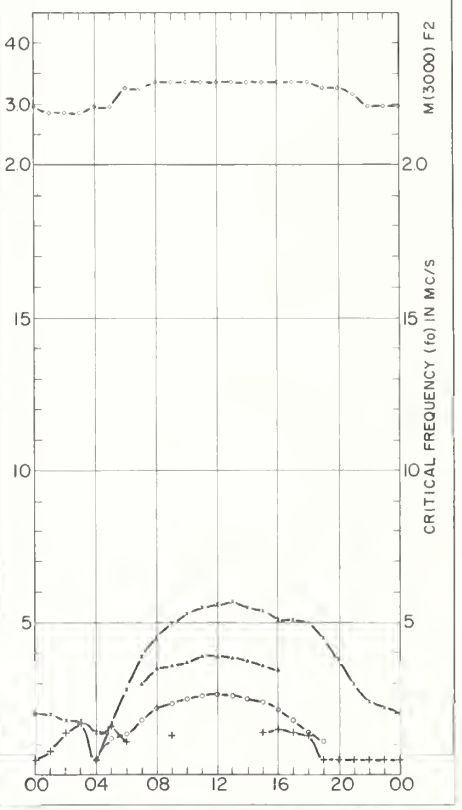


UPPSALA
SWEDEN

LAT. 59.8N LONG. 17.6E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	20	20	18	18	14	17	28	39	45	50	53	55	56	57	55	54	51	51	50	45	38	30	24	22
	CNT	25	24	23	22	23	25	31	31	31	31	31	31	31	31	31	31	31	31	31	29	30	27	28	24
	U Q	24	23	23	20	19	21	33	41	50	57	60	60	60	60	59	58	55	53	53	52	45	35	29	26
00	L Q	18	17	14	15	13	14	23	36	43	45	48	48	51	52	51	52	50	48	45	42	33	25	22	19
foF1	MED								300	350	360	370	390	390	385	375	360	345							
	CNT								2	10	21	27	29	25	26	18	9	2							
10																									
foE	MED					U 50	120	135	180	220	235	250	260	265	260	250	240	215	180	140	110				
20	CNT					1	2	20	30	28	29	25	28	29	31	30	30	30	26	13	1				
foEs	MED	5	8	14	17	5	16	11			13						14	15	14	13	5	5	5	5	5
	CNT	23	24	29	29	23	22	31	30	31	31	31	31	31	31	31	31	31	30	31	22	16	14	16	20
30																									
M	MED	300	290	290	290	300	300	330	330	340	340	340	340	340	340	340	340	340	340	340	330	330	320	300	300
3000	CNT	25	24	22	22	23	25	31	31	31	30	31	31	30	31	31	31	31	30	31	29	30	27	28	24
F2	U Q	300	310	300	300	300	310	330	350	350	350	350	350	350	350	350	350	350	350	350	345	340	330	315	310
03	L Q	285	280	280	280	280	295	310	320	330	330	330	330	330	330	330	330	340	330	330	330	310	310	290	290
h'F2	MED								275	260	275	260	260	260	260	255	265	250	255						
	CNT								5	10	23	30	30	28	29	23	17	5	3						
	U Q								335	285	310	300	300	290	285	275	290	290	260						
04	L Q								240	250	255	245	250	250	245	250	250	250	250						
h'E	MED						130	110	110	105	105	100	100	100	100	105	105	110	U 110	120	140				
24	CNT						2	12	22	28	30	31	30	28	29	30	26	25	16	5	1				
h'F	MED	U 255	U 255	U 260	U 255		U 255	250	240	215	205	200	200	200	200	200	205	210	215	220	220	220	U 230	U 240	U 245	U 250
	CNT	17	19	17	15		9	15	29	31	31	30	30	31	31	31	30		31	31	31	30	30	26	21	18
	U Q	U 270 E	U 265 E	U 275 E	U 270 U		U 280 E	U 260 E	250	230	215	210	210	205	205	205	210	215	220	230	240	230	245	U 250 U	E 255 E	U 260 E
16	L Q	250	250	255	245		250	245	230	210	200	200	200	195	195	195	200	205	210	215	215	215	215	220	240	250
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



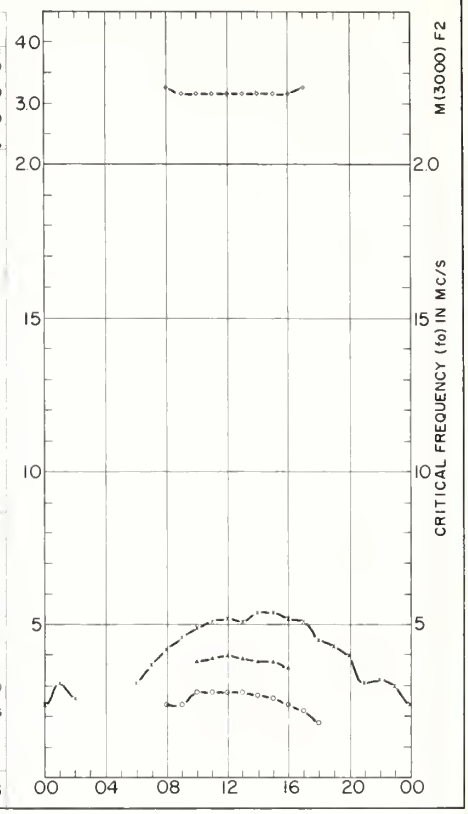
CHURCHILL
CANADA

LAT. 58.8N LONG. 94.2W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 90.0W

1964 03 CHURCHILL 90.0W

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	U 24	U 31	26				U 31	U 37	42	46	49	51	52	51	54	54	52	F 51	F 45	F 43	F 40	F 31	F 32	F 30
	CNT	7	5	10	3	3	3	5	7	13	18	20	22	24	27	28	30	28	29	28	20	17	19	13	10
	U Q	37	32	30				40	41	44	48	51	55	58	59	59	60	58	54	50	50	43	38	36	30
	L Q	20	22	23				26	35	40	42	44	45	44	46	47	47	48	44	41	37	32	29	26	26
foF1 10	MED										U 380	390	U L 400	390	380	U L 380	U 360								
	CNT									2	2	8	13	18	21	23	12	5							
foE 20	MED									U 240	240	280	280	280	280	270	260	240	220	180					
	CNT							1	4	6	11	9	12	13	19	20	21	18	16	13	4				
foEs 30																									
M 3000 F2 03	MED									U 330	U 320	U 320	U 320	320	320	320	320	U 320	U 330						
	CNT							1	4	5	9	7	9	13	15	15	16	14	9	3	3		1		
h'F2 04	MED									U 300	300	300	305	305	310	310	300	285	270						
	CNT								2	5	13	15	19	21	24	26	24	23	16	2					
h'E 24																									
h'F 16	MED			U 260					250	265	210	200	200	200	200	215	215	200	240	245	250	260	U 270	U 250	U 250
	CNT	4	4	6	2	1	2	4	7	11	13	12	11	15	21	23	17	19	22	22	15	14	9	6	5
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



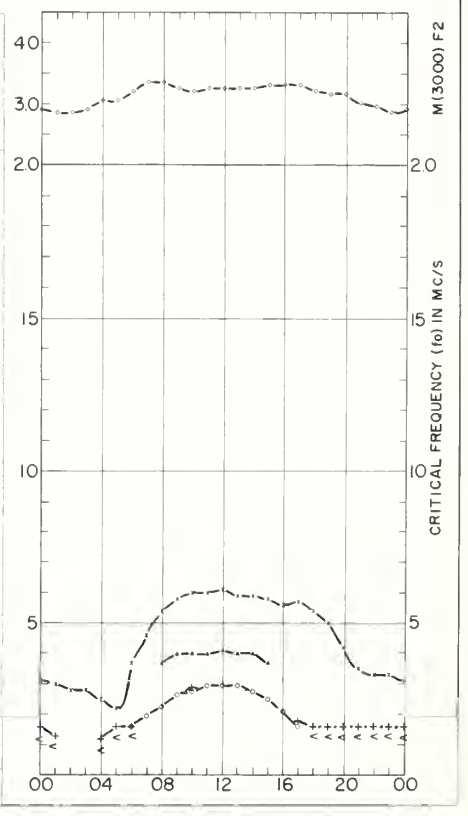
WARSAW
POLAND

LAT. 52.2N LONG. 21.2E SWEEP 1.0 MC TO 18.0 MC IN 20 SEC TIME 15.0E

1964 03 WARSAW 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	31	30	28	28	25	22	37	46	54	58	60	60	61	59	59	58	56	57	C 54	50	42	35	33	33
	CNT	21	21	22	20	21	20	22	24	20	19	D 20	21	23	22	21	24	25	21	24	24	24	23	23	23
	U Q	32	32	31	30	30	25	40	51	60	62	60	63	67	62	62	61	60	59	56	52	45	40	35	36
	L Q	29	28	27	26	21	20	30	42	49	53	54	53	57	57	56	56	54	53	50	48	40	31	30	30
foF1 10	MED									L 370	400	400	400	410	400	L 400	L 370								
	CNT								2	10	15	18	20	13	15	11	7								
	U Q									380	400	400	410	420	410	400	380								
	L Q									350	390	400	400	400	400	400	340								
foE 20	MED							E S 160	195	225	265	275	295	295	295	275	250	210	U S 160	E					
	CNT							18	21	20	16	15	19	22	19	22	21	23	18	16					
foEs 30	MED	E 16	E 13	E S	E	E 12	E S 16	E S 16	G	G	G	29	G	G	G	G	G	G	18	E S 16	E S 16	E S 16	E S 16	E S 16	E S 16
	CNT	22	22	23	23	25	25	25	25	23	22	21	23	24	23	23	23	25	23	25	25	24	25	24	25
	U Q	E 16	E 16	E	E 12	E 12	E 12	E 16	G 20	24	30	30	30	G	G	27	G	23	20	16	16	E 16	E 16	E 16	E 16
	L Q	E 16	E 12	E	E	E	E 16	E 16	G	G	G	G	G	G	G	G	G	G	G	16	16	E 16	E 16	E 16	E 16
M 3000 F2 03	MED	295	290	290	295	310	310	325	340	340	330	325	330	330	330	330	335	335	335	325	320	320	305	300	290
	CNT	16	16	17	17	12	12	21	21	12	16	14	16	17	14	16	23	20	15	15	16	18	18	19	17
	U Q	310	295	300	300	310	320	330	350	345	340	335	340	340	335	335	345	345	340	330	330	330	310	305	300
	L Q	290	285	280	280	300	300	310	330	385	320	320	320	320	325	320	325	330	325	315	315	310	295	290	285
h'F2 04	MED									L 260	275	275	275	280	280	275	265								
	CNT								2	10	15	15	23	16	16	12	9								
	U Q									275	300	300	290	290	295	280	270								
	L Q									250	255	255	255	260	260	265	255								
h'E 24	MED								S 115	107	105	105	105	103	105	105	107	S 111							
	CNT								16	17	18	16	20	17	15	17	15	16	1						
h'F 16	MED	E S 285	E S 275	E S 270	E E 270	E S 255	E S 265	E S 240	230	220	215	205	200	205	205	225	225	235	240	E S 225	E S 235	E S 245	E S 255	E S 275	E S 275
	CNT	21	22	23	22	24	22	25	25	22	22	21	22	23	24	23	23	25	23	25	23	24	25	23	22
	U Q	E 300	E 290	E 285	E 280	E 275	E 295	250	230	225	225	210	210	215	210	225	230	240	245	E 235	E 245	E 250	E 265	E 295	E 290
	L Q	E 260	E 270	E 265	E 255	E 250	E 255	230	225	210	200	200	200	195	200	205	210	225	225	E 215	E 225	E 230	E 245	E 255	E 265
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

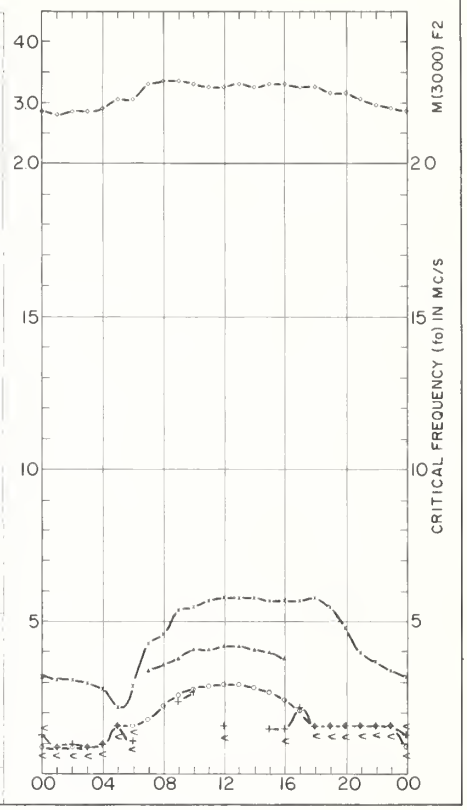


SLOUGH
ENGLAND

LAT. 51.5N LONG. 0.6W SWEEP 0.67 MC TO 25.0 MC IN 300 SEC TIME 0.0

MARCH 1964

CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	32	31	31	30	28	22	29	43	46	54	55	57	58	58	58	57	57	57	58	55	48	40	37	34
	CNT	22	24	22	23	18	17	25	27	28	27	28	25	26	25	26	26	26	28	28	28	26	25	23	23
	U Q	35	34	34	33	31	25	32	45	51	60	60	62	60	60	61	62	63	62	62	60	53	46	39	37
00	L Q	30	30	29	28	25	19	24	40	45	48	53	54	55	56	56	55	55	54	54	50	44	36	34	32
foF1	MEO								L 340	U L 360	U L 380	410	U L 410	U L 420	U L 420	U L 410	U L 400	U L 380							
	CNT								1	2	6	11	15	16	13	8	6	1							
	U Q										390	420	420	430	420		400								
10	L Q										380	400	410	420	410		390								
foE	MEO	E 90	E 90	E 90	E 90	E 100	E 160	S 160	E 180	225	260	280	290	295	295	285	270	245	210	E S 160	E S 160	E S 160	E S 160	E S 160	E S 160
20	CNT	8	12	9	10	13	27	26	26	24	20	23	23	24	25	24	25	26	18	21	28	28	28	28	28
foEs	MEO	E 13	E 9	E 10	E 9	E 10	E 16	S 11	G	G	24	27	G	E G 16	G	G		E G 15	15	E 22	S 16	E S 16	E S 16	E S 16	E S 16
	CNT	23	20	19	12	E 15	E 28	E 14	26	28	28	28	26	26	25	26	26	26	28	28	28	28	28	28	28
	U Q	E 13	E 12	E 10	E 9	E 10	E 16	E 11		24	28	30	28	27	22	20	26	26	24	18	E 18				
30	L Q	E 9	E 8	E 9	E 8	E 9	E 14	E 10		G	G	G	G	G	G	G	G	G	17	14	E 16				
M 3000 F2	MEO	290	285	290	290	295	310	310	335	340	340	335	330	330	335	330	335	335	330	330	320	320	310	300	295
	CNT	22	24	22	22	17	13	24	27	27	26	28	24	26	25	26	26	26	28	28	28	26	25	23	22
	U Q	295	300	295	300	300	320	320	350	350	350	350	345	345	340	340	340	340	340	335	330	330	315	310	305
03	L Q	285	280	280	280	285	290	290	330	325	320	320	315	310	320	320	320	325	330	320	310	305	300	290	295
h'F2	MEO								320	290	290	280	270	290	280	280	275	270	315						
	CNT								2	9	15	26	26	24	23	22	20	9	1						
	U Q									310	305	295	305	300	300	300	280	270							
04	L Q									250	250	260	255	260	260	260	270	260							
h'E	MEO							125	125	110	110	110	110	105	100	100	100	100	120	125					
24	CNT							3	17	28	28	26	25	23	23	23	22	24	18	1					
h'F	MEO	270	270	270	270	260	260	250	230	220	210	205	205	200	205	210	220	230	240	240	230	240	250	260	270
	CNT	28	28	28	28	26	15	23	28	28	28	28	26	24	25	25	26	26	28	28	28	28	28	26	26
	U Q	280	280	290	280	280	275	260	240	225	215	215	210	205	210	220	230	235	240	245	240	250	250	275	285
16	L Q	260	260	260	250	250	250	245	220	210	205	205	200	195	200	200	210	225	230	230	225	225	240	250	255
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

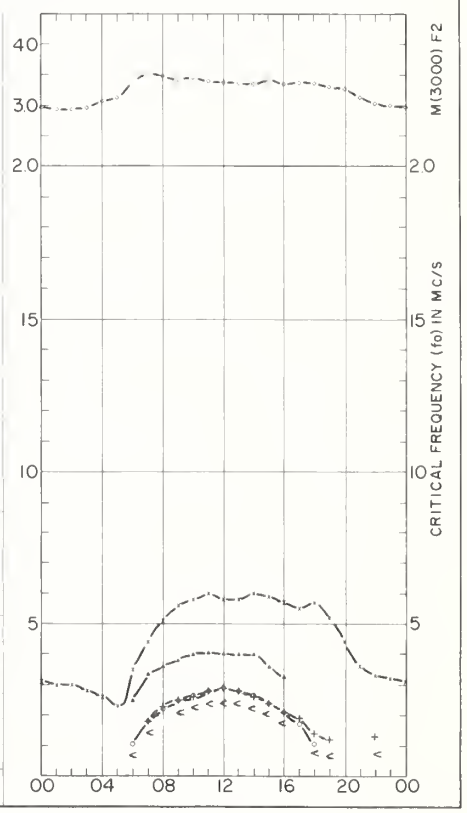


DOURBES
BELGIUM

LAT. 50.1N LONG. 4.6E SWEEP 1.0 MC TO 20.0 MC IN 180 SEC TIME 0.0

MARCH 1964

CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	31	30	30	28	26	23	35	44	51	56	58	60	58	58	60	59	57	55	57	52	44	36	33	32
	CNT	27	27	27	26	26	26	24	24	25	22	23	25	24	21	23	24	25	26	26	25	25	26	27	27
	U Q	33	32	32	31	28	25	39	51	58	60	61	62	62	60	63	61	60	64	63	57	50	40	37	35
00	L Q	30	29	28	26	23	20	30	42	46	50	56	56	56	56	57	56	55	53	53	48	38	32	31	30
foF1	MEO							248	335	360	380	400	405	402	400	400	360	325							
	CNT							2	2	10	15	19	22	20	14	13	7	4							
	U Q									370	395	410	415	410	405	400	380	352							
10	L Q									340	360	380	390	400	400	382	350	290							
foE	MEO							E 105	E 180	220	248	265	280	290	280	265	240	210	170	E 105					
20	CNT							22	25	24	22	20	23	24	23	21	23	24	15	12					
foEs	MEO	E	E	E	E	E	E	E	E 18	E	G	G	G	G	G	G	G	G			E E	E	E	E	S E
	CNT	28	28	28	28	28	28	26	26	27	25	26	26	26	23	24	24	26	26	26	26	27	27	28	28
	U Q	E 11	E 12	E	E	E	E	G 12	G 18	G 27	G 26	G 29	G 28	G 29	G 28	G 26	G 24	G 24	G 21	G 16	G 16	G 12	S 15	S 16	S 16
30	L Q	E	E	E	E	E	E	E	G 18	G 22	G 25	G 26	G 28	G 29	G 28	G 26	G 24	G 21	G 17	G 11	E	E	E	E	E
M 3000 F2	MEO	300	297	297	300	310	316	342	354	352	346	349	343	341	339	338	344	338	340	339	333	330	316	306	303
	CNT	27	27	27	26	26	24	24	24	25	22	23	25	24	21	23	24	25	26	26	25	25	26	27	27
	U Q	312	303	303	308	319	322	354	360	359	363	358	353	350	349	349	354	343	345	345	343	344	323	314	311
03	L Q	294	288	290	292	296	302	326	340	335	332	332	329	332	330	328	334	333	333	332	319	318	303	298	296
h'F2	MEO							358	272	270	275	275	285	288	278	290	270	270	270						
	CNT							2	10	17	23	23	25	24	20	22	18	13	6						
	U Q								290	295	310	300	300	310	308	310	290	280	275						
04	L Q								250	250	250	260	275	265	270	270	265	255	260						
h'E	MEO							E	131	121	119	115	115	116	117	118	120	121	U A 126	O E 131					
24	MEO							E	131	121	119	115	115	118	120	120	121	122	132	E					
h'F	CNT							21	26	27	25	26	27	26	23	24	25	25	22	17					
16																									
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



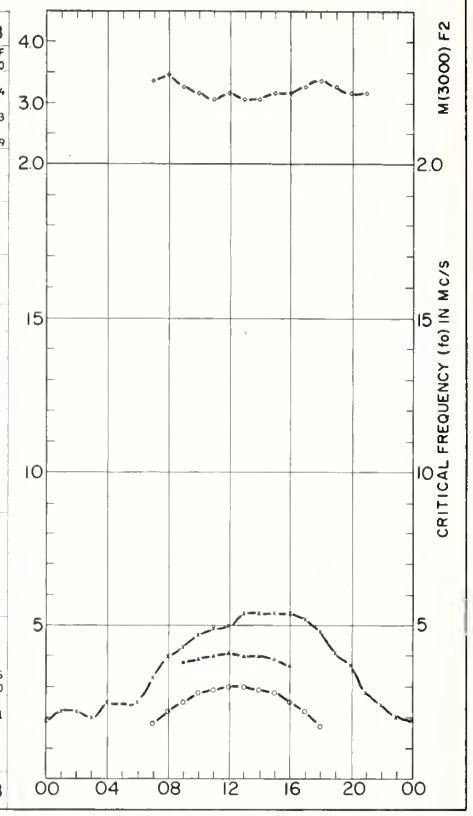
KENORA
CANADA

LAT. 49.8N LONG. 94.4W SWEEP 1.0 MC TO 16.0 MC IN 20 SEC TIME 90.0W

MARCH 1964

1964 03 KENORA 90.0W

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	19	22	22	20	25		25	33	40	43	47	49	50	54	54	54	54	52	48	41	37	28	24	20
	CNT	21	5	8	5	6	4	15	29	28	29	29	31	30	30	30	30	30	30	31	31	31	29	29	24
	U Q	20	26	24	24	30		28	36	44	50	53	55	58	60	60	58	58	58	51	47	47	32	29	23
	L Q	16	18	16	20	20		22	30	38	40	42	44	46	46	48	46	47	49	43	38	31	25	23	19
foF1 10	MED										380	390	400	410	400	400	390	370							
	CNT									3	11	22	29	29	29	27	24	7							
foE 20	MED								180	220	250	280	290	300	300	290	280	250	220	170					
	CNT								17	28	24	28	28	29	28	27	27	27	26	20					
foEs 30																									
M 3000 F2 03	MED								340	350	330	320	310	320	310	310	320	320	330	340	330	320	320		
	CNT		1					3	10	14	13	16	16	19	21	23	21	20	21	19	9	9	5	1	
h'F2 04	MED									270	300	315	350	320	305	300	295	280	255						
	CNT								1	14	24	27	31	29	30	30	29	29	25	2					
h'E 24																									
h'F 16	MED	310						270	230	210	200	200	195	195	200	200	200	205	220	230	225	240	255	270	290
	CNT	5	1	2	2	1		10	28	28	28	28	29	29	29	28	28	28	28	30	30	28	19	17	11
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



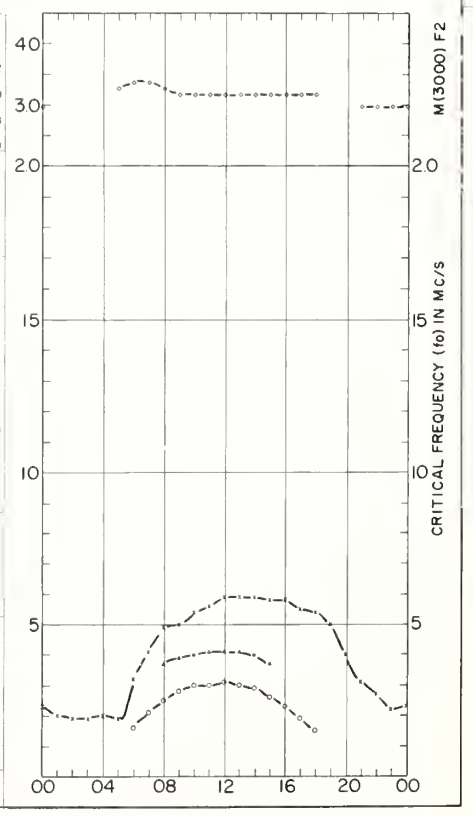
ST JOHNS
NEWFOUNDLAND

LAT. 47.6N LONG. 52.7W SWEEP 1.0 MC TO 16.0 MC IN 20 SEC TIME 60.0W

MARCH 1964

1964 03 ST JOHNS 60.0W

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	23	20	19	19	20	19	32	41	49	50	54	56	59	59	59	58	58	55	54	50	40	31	27	22
	CNT	26	25	24	20	16	21	31	31	31	30	30	31	31	31	31	30	30	31	30	29	29	31	30	30
	U Q	26	24	22	24	22	23	38	46	52	53	59	60	62	65	66	63	60	60	61	56	46	37	31	28
	L Q	18	18	18	16	16	17	27	40	43	47	48	50	52	53	52	52	53	52	50	42	32	27	22	20
foF1 10	MED									370	390	400	410	410	410	400	370								
	CNT									10	19	18	22	22	20	18	6	2							
foE 20	MED							160	210	250	280	300	300	310	300	290	260	230	190	150					
	CNT							22	30	30	30	29	30	31	31	31	30	29	27	6					
foEs 30																									
M 3000 F2 03	MED	300				330	340	340		330	320	320	320	320	320	320	320	320	320	320			300	300	300
	CNT	5	3	1		1	6	19	19	17	18	21	24	24	28	27	25	21	18	7	4	1	8	6	6
h'F2 04	MED								270	285	300	300	305	300	300	300	280	280	280						
	CNT								6	29	29	28	29	31	30	31	28	27	7						
h'E 24																									
h'F 16	MED	290	300	300	300	285	275	250	225	205	200	200	200	200	205	220	220	230	250	240	240	250	280	290	290
	CNT	13	12	11	8	7	14	31	31	31	30	29	29	31	29	31	29	30	30	30	29	29	27	24	16
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

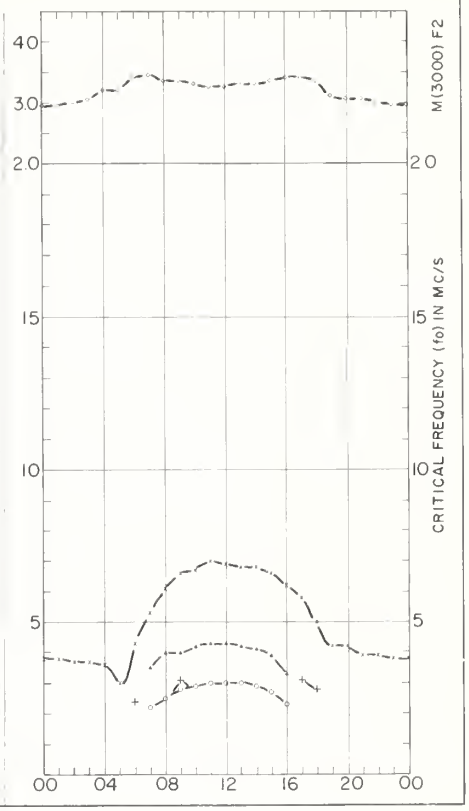


WAKKANAI
JAPAN

LAT. 45.4N LONG. 141.7E SWEEP 1.0 MC TO 18.0 MC IN 40 SEC TIME 135.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	38	38	37	37	36	30	43	53	61	66	67	70	69	68	68	66	62	58	50	42	42	39	39	38
	CNT	19	19	19	19	18	25	27	28	27	28	30	30	31	30	30	30	30	30	30	30	29	28	25	22
	U Q	40	41	40	41	40	36	46	56	65	71	73	73	73	75	71	68	63	60	57	53	51	46	44	42
	L Q	35	36	34	34	34	28	38	50	54	60	62	63	64	65	65	63	58	54	46	36	37	36	36	36
foF1 10	MED								350	400	400	420	430	430	420	410	390	330							
	CNT								1	12	24	29	28	31	29	29	27	3							
foE 20	MED						E		220	250	280	290	300	300	300	290	270	230							
	CNT						1		14	23	24	25	27	29	29	30	30	24							
foEs 30	MED	E	E	E	E	E	E		G	G		G	G	G	G	G	G	G			E	E	E	E	E
	CNT							24			31								31	28					
	U Q	30	30	29	29	29	24	3	18	27	26	28	29	31	30	30	29	27	13	14	28	30	29	30	30
	L Q	E	E	E	21	E	E	E	G	32	35	34	G	38	33	G	26	30	34	31	30	E	E	E	E
M 3000 F2 03	MED	E	E	E	E	E	E	30	G	G	G	G	G	G	G	G	G	G	28	E	E	E	E	E	E
	CNT	300	300	305	310	325	325	345	350	340	340	335	330	330	335	335	340	345	345	340	315	310	310	305	300
h'F2 04	MED	19	19	19	19	18	25	27	28	27	28	30	30	31	30	30	30	30	30	30	30	29	28	25	22
	CNT								350	270	260	265	270	275	275	270	255	250							
h'E 24									1	12	24	28	27	31	29	29	27	5							
h'F 16	MED	300	290	280	250	240	250	230	230	220	215	220	205	210	220	225	230	235	230	225	260	265	270	290	300
	CNT	30	30	29	29	29	28	28	28	27	28	30	30	31	30	30	30	30	30	30	30	30	30	30	30
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

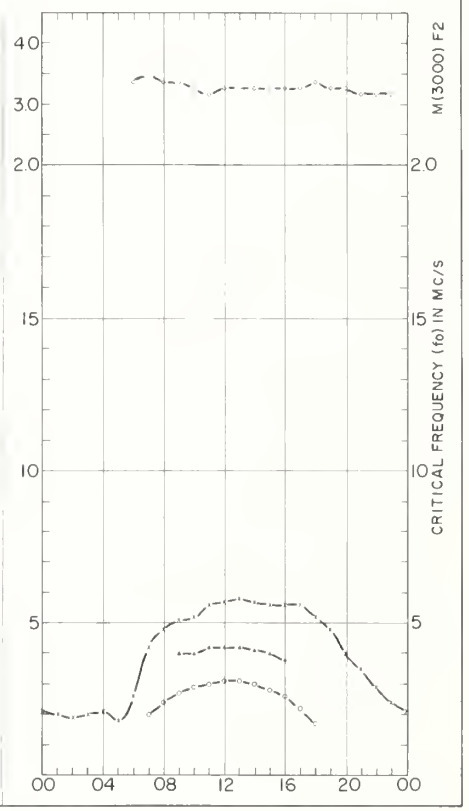


OTTAWA
CANADA

LAT. 45.4N LONG. 75.9W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 75.0W

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		F	S	S	S	U S	S	F																	F
foF2 00	MED	21	20	19	20	21	18	26	42	48	51	52	56	57	58	57	56	56	56	52	48	40	35	29	24
	CNT	26	24	19	11	8	12	24	30	30	30	31	31	31	31	31	31	31	31	31	30	30	29	29	29
	U Q	25	22	20	26	24	22	29	45	52	55	57	61	62	62	63	63	61	60	60	56	47	38	32	29
	L Q	20	18	17	17	16	15	23	35	42	46	46	48	49	51	51	52	51	50	48	43	34	28	25	22
foF1 10	MED									U L 400	L U L 400	L U L 420	L U L 420	L U L 420	U L 420	U L 410	U L 400	U L 380							
	CNT									4	14	23	28	27	26	25	17	6	1						
foE 20	MED								200	240	270	290	300	310	310	300	280	260	220	170					
	CNT							3	26	29	29	31	30	29	30	29	29	27	27	15					
foEs 30																									
M 3000 F2 03	MED							U		340	350	340	340	330	320	330	330	330	330	340	330	330	320	U 320	U 320
	CNT	2						5	19	22	21	23	25	26	27	28	30	31	30	26	19	16	11	9	6
h'F2 04	MED									255	280	300	300	300	300	295	290	270	260						
	CNT								4	18	28	30	30	30	30	31	31	30	24						
h'E 24																									
h'F 16	MED	S 300	S 300	S 300				S 250	215	200	200	195	190	200	200	200	200	205	220	230	220	235	250	270	S 280
	CNT	15	7	5	4	1	1	17	30	30	30	31	31	29	28	29	29	29	30	30	30	29	28	24	17
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

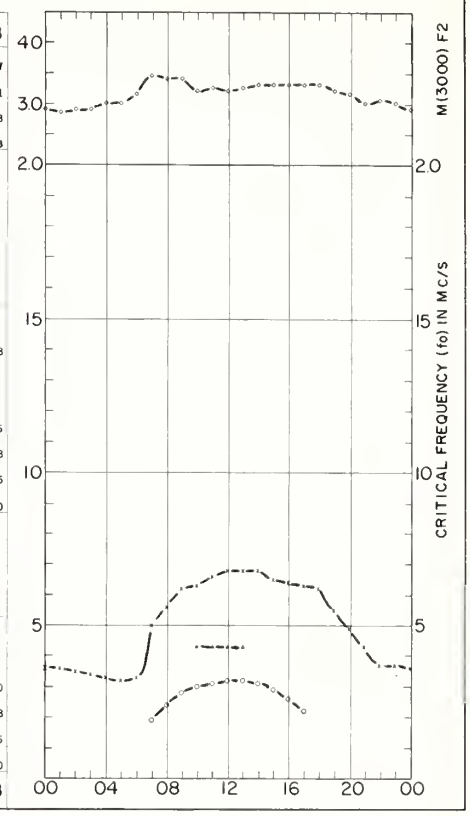


ROME
ITALY

LAT. 41.8N LONG. 12.5E SWEEP 1.4 MC TO 15.0 MC IN 300 SEC TIME 15.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	36	36	35	34	33	32	33	50	56	62	63	66	68	68	68	65	64	63	62	55 U	49 U	43	37	37
	CNT	23	29	27	27	26	28	26	29	27	27	28	25	25	31	27	26	28	25	19	26 U	27 U	23	22	21 U
	U Q	39	38	37	37	36	34	35	52	59	64	67	71	75	72	71	70	69	68	69	66 U	54 U	48	42	38 U
00	L Q	33	32	33	32	31	30	31	47	55	57	60	63	63	65	65	62	61	61	58	49 U	45 U	37	33	33 U
foF1	MED											430	430	430	430										
	CNT									1	2	5	9	9	11	4	1	1							
	U Q											430	440	440	440										
10	L Q											420	420	410	420										
foE	MED								190	240	280	300 U	310	320	320	310	290	260	220						
20	CNT								13	25	23	23	24	23	27	26	26	29	27						
foEs	MED																								
	CNT	28	27	27	27	27	28	28	28	28	28	26	27	25	30	27	27	29	29	27	30	29	30	28	28
30																									
M	MED	295	290	295	295	305	305	320	350	345	345	325	330	325	330	335	335	335	335	335	325 U	320	305	310	305
3000	CNT	23	29	26	26	23	25	25	29	27	26	27	25	24	31	27	25	28	23	17	26 U	23	20	19	18
F2	U Q	305	300	300	305	315	320	330	360	355	350	350	340	335	340	345	340	340	340	345	335 U	330	320	315	305
03	L Q	285	285	290	290	300	300	315	335	335	330	315	320	320	325	325	325	330	325	325	315 U	310	295	295	290
h'F2	MED											300	270	270	280										
	CNT									2	5	9	9	11	4	1	1								
	U Q											380	320	285	290										
04	L Q											295	260	260	260										
h'E	MED								140	120	110	110	110	110	110	110	110	120	120						
24	CNT								13	25	27	26	27	25	30	26	26	28	26	2					
	MED	290	290	290	280	260	255	250	240	220	210	200	200	200	200	220	225	240	240	240	230	240	250	260	290
h'F	CNT	28	28	27	27	27	28	28	28	28	27	27	25	26	31	29	28	29	29	28	29	30	30	28	28
	U Q	290	300	300	290	270	290	260	240	230	220	220	215	220	230	230	240	240	240	240	240	250	260	280	295
16	L Q	270	280	270	260	250	250	240	230	210	200	200	200	200	200	200	210	220	240	230	220	230	240	250	270
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

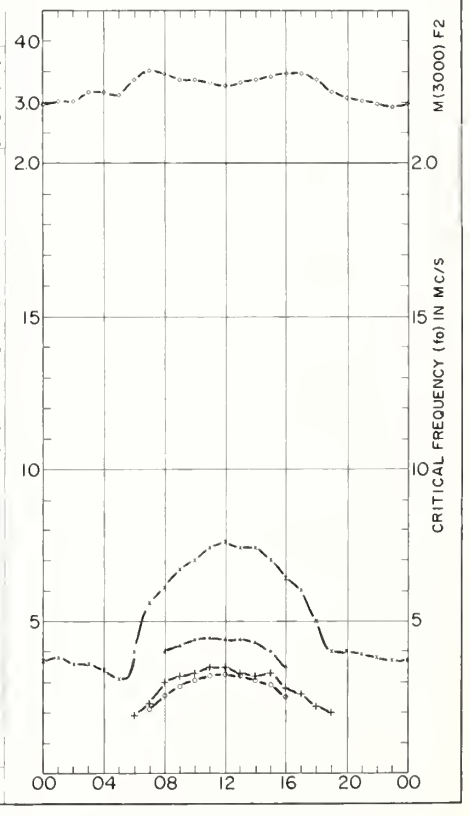


AKITA
JAPAN

LAT. 39.7N LONG. 140.1E SWEEP 1.6 MC TO 20.0 MC IN 20 SEC TIME 135.0E

MARCH 1964

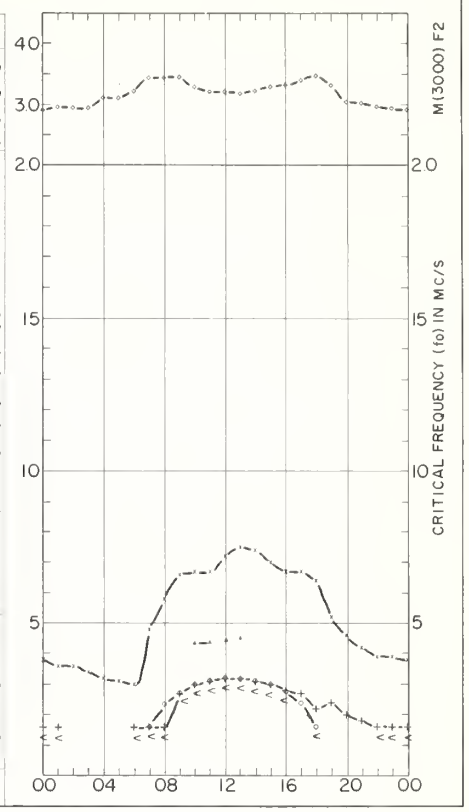
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	37	38	36	36	34	31	40	56	61	67	70	74	76	74	74	70	64	60	50	40	40	39	38	37
	CNT	26	28	26	26	27	27	29	29	29	29	29	30	30	30	30	30	30	29	29	30	30	29	28	27
	U Q	40	40	39	38	36	34	44	60	67	74	76	81	78	82	78	74	67	64	58	53	48	44	40	40
00	L Q	35	35	35	35	32	28	38	50	58	61	62	68	69	70	68	65	61	56	48	36	35	35	35	35
foF1	MED									400	420	440	445	440	440	430	400	350							
	CNT									11	24	29	30	30	29	25	18	2							
10																									
foE	MED							E	210	255	285	305	320	325	320	305	290	250		E	E				
20	CNT							2	4	5	9	11	10	14	15	14	10	3	2	1					
	MED	E	E	E	E	E	E	19	23	30	32	33	35	35	33	32	33	28	26	22	20	E	E	E	E
foEs	CNT	29	29	29	29	29	28	27	25	29	29	27	28	30	30	30	30	30	24	30	30	30	30	30	30
	U Q	22 E	21 E	21 E	22 E	21 E	19 E	22 E	26 G	33	35	36 G	38 G	37 G	37	38 G	38	35	36	25 E	29 E	22 E	23 E	E	21 E
30	L Q									25	28						29	24	22						
M	MED	300	305	305	320	320	315	340	355	350	340	340	335	330	335	340	345	350	350	340	320	310	305	300	295
3000	CNT	26	28	26	26	27	27	29	29	29	29	29	30	30	30	30	30	30	29	29	30	30	29	28	27
F2																									
03																									
h'F2	MED								245	250	255	275	280	280	280	275	260	245	245						
	CNT								7	26	29	29	30	30	30	30	30	28	3						
04																									
h'E																									
24																									
h'F	MED	285	280	270	250	245	250	235	235	220	215	220	210	210	225	225	230	240	230	225	235	250	270	280	285
	CNT	28	28	29	29	27	27	29	29	29	29	29	30	30	28	27	28	29	29	29	27	28	29	30	28
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



ATHENS GREECE — LAT. 38.0N LONG. 23.6E — SWEEP 1.0 MC TO 20.0 — MC IN 30 SEC — TIME 30.0E — 1964 03 — ATHENS 30.0E

MARCH 1964

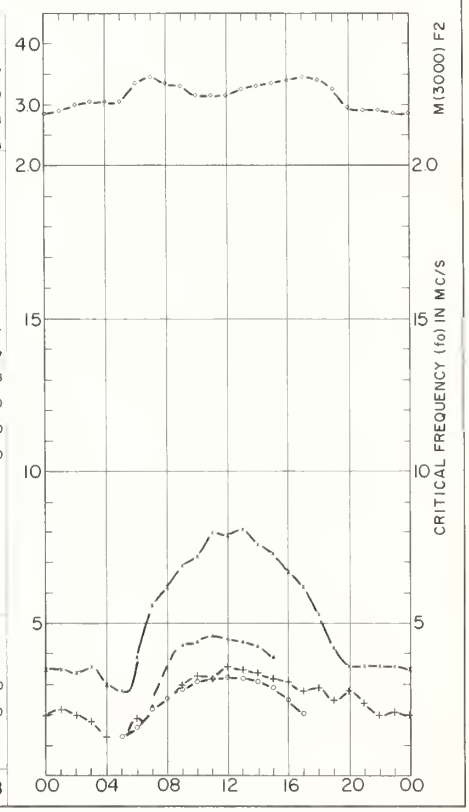
CHAR.		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		38	36	36	34	32	31	30	48	58	66	67	67	72	75	74	70	67	67	64	52	46	42	39	39
	CNT		22	24	22	24	22	25	24	27	25	25	27	25	27	24	24	25	26	28	20	23	20	24	21	19
	U Q		40	40	38	38	35	34	34	51	62	70	72	74	82	79	76	73	72	72	70	60	50	44	42	43
00	L Q		32	32	32	31	31	28	28	46	56	59	64	62	71	72	71	68	65	65	57	49	42	38	32	32
foF1	MED												435	438	450	L 452										
	CNT												1	2	5	8										
	U Q														455	L 458										
10	L Q														435	438										
foE	MED									E S 160	235	272	300	312	322	318	312	300	276	238	E S 160				
20	CNT									23	21	17	21	22	23	21	24	26	24	22	22				
foEs	MED		E S 16	E S 16		E	E	E E S 16	E S 16	E S 16	E S 16	E G 27	E G 30	E G 31	E G 32	E G 32	E G 31	E G 30	E G 28	27	22	24	20	E S 18	E S 16	E S 16
	CNT		29	E S 29	E S 28	E 28	27	E 27	E E S 26	27	25	26	27	29	E G 28	27	27	27	28	28	28	29	28	29	28	28
	U Q		E S 20	E S 16	E S 16	E	E	E	E E S 16	E S 19	E S 25	E G 30	E G 33	E G 32	E G 32	E G 32	E G 32	E G 34	E G 34	E G 30	E G 26	30	E S 23	E S 24	E S 20	E S 17
30	L Q		E S 16	E S 16		E	E		E S 16	E S 16	E S 16	E G 27	E G 30	E G 31	E G 32	E G 32	E G 31	E G 30	E G 28	E G 24	20	19	E S 16	E S 16	E S 16	E S 16
M 3000 F2	MED		295	300	299	299	315	315	326	348	348	350	333	325	325	322	326	333	336	344	351	335	308	306	300	297
	CNT		22	24	22	24	22	25	24	27	25	25	27	25	27	24	24	25	26	28	20	23	20	24	21	19
	U Q		303	306	305	318	333	325	334	359	362	358	339	338	331	329	335	340	344	352	354	348	342	318	312	307
03	L Q		282	290	293	294	306	303	310	336	338	339	317	312	318	314	318	321	331	336	342	327	298	295	290	285
h'F2	MED												250	260	280	275										
	CNT												1	2	5	8										
	U Q														310	280										
04	L Q														265	260										
h'E	MED									E S 125	113	111	109	109	109	109	111	111	111	115	E S 122				
24	CNT									5	24	21	25	28	28	26	26	27	27	28	12				
h'F	MED		E S 260	E S 260	E S 250	E S 240	E S 230	E S 220	E S 225	E S 215	210	195	190	190	190	205	200	210	220	220	220	205	E S 215	E S 240	E S 250	E S 260
	CNT		29	E S 29	E S 28	E S 28	27	E S 27	E S 26	E S 27	25	26	27	29	28	27	27	27	28	28	28	29	28	29	28	28
	U Q		E S 280	E S 270	E S 260	E S 260	E S 240	E S 230	E S 240	E S 220	210	205	195	205	205	220	220	225	220	230	220	210	E S 230	E S 250	E S 260	E S 270
16	L Q		E S 240	E S 245	E S 240	E S 230	E S 220	E S 210	E S 215	E S 210	200	190	180	180	190	190	190	200	205	220	210	200	E S 205	E S 220	E S 240	E S 240
CHAR.		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



KOKUBUNJI JAPAN — LAT. 35.7N LONG. 139.5E — SWEEP 1.0 MC TO 20.0 — MC IN 20 SEC — TIME 135.0E — 1964 03 — KOKUBUNJI 135.0E

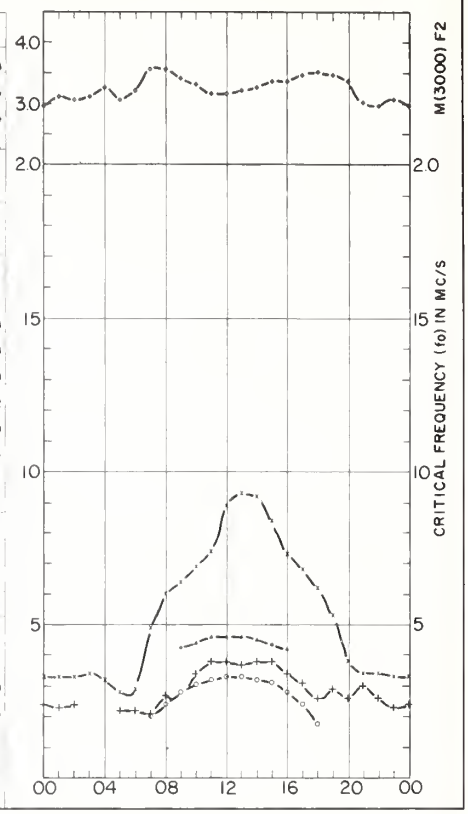
MARCH 1964

CHAR.		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		35	35	34	36	30	28	39	56	62	69	72	80	79	81	76	73	67	62	53	42	36	36	36	36
	CNT		30	29	28	30	29	30	29	30	29	26	28	28	29	30	30	31	31	31	30	28	29	29	31	30
	U Q		38	38	38	38	32	31	44	59	66	73	78	85	88	88	86	79	74	68	63	50	44	40	38	38
00	L Q		33	33	33	33	28	26	36	52	57	62	66	71	71	74	70	67	63	59	45	36	32	32	33	33
foF1	MED									230		430	440	460	450	440	425	390								
	CNT									1		9	5	7	14	11	10	1								
10																										
foE	MED							130	160	220	255	285	310	320	325	320	310	290	250	205						
20	CNT							1	13	27	23	18	17	20	23	24	25	22	21	14						
foEs	MED		20	22	20	18	13 E		19	G	G	30	33	32	36	35	34	32	31	28	29	25	28	24	20	21
	CNT		27	26	28	29	28	29	22	30	28	26	26	26	29	29	30	31	31	31	27	27	28	25	29	24
	U Q		22	24	23	23	19	20	22	25	30	35	37	39	38	38	37	39	37	38	36	39	41	36	26	28
30	L Q		E	E	E	E	E	E	G	G	G	G	G	G	G	33	G	G	25	19	21	21	18	20	E	20
M 3000 F2	MED		290	295	305	310	310	310	340	350	340	335	320	320	320	330	335	340	345	350	345	330	300	295	295	290
	CNT		30	29	28	30	29	30	29	30	29	26	28	28	29	30	30	31	31	31	30	27	29	28	31	30
03																										
h'F2	MED									250	250	265	275	290	275	275	270	260	250	230						
	CNT									13	26	26	28	27	29	29	30	31	29	19						
04																										
h'E																										
24																										
h'F	MED		275	270	260	245	220	250	240	230	225	215	210	210	230	220	220	230	E 230	230	220	220	250	270	280	280
	CNT		31	29	29	30	29	29	29	30	29	25	27	26	27	27	25	27	25	26	29	24	22	28	30	30
16																										
CHAR.		HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



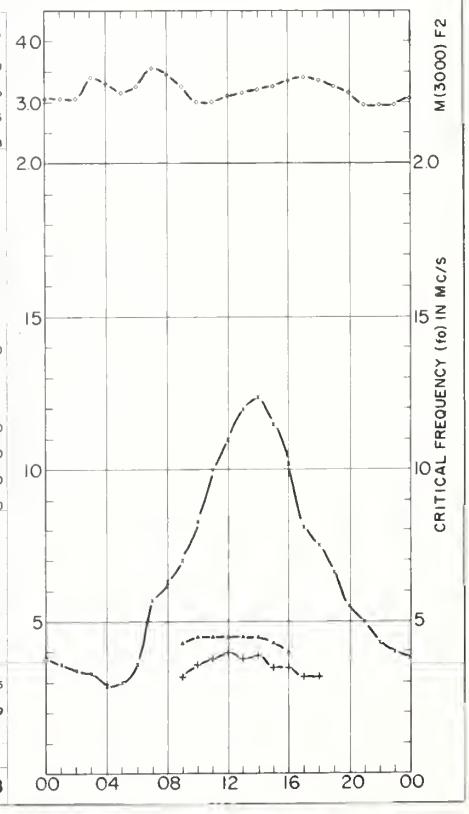
YAMAGAWA
JAPAN
LAT. 31.2N LONG.130.6E SWEEP 0.55 MC TO 17.0 MC IN 20 SEC TIME 135.0E
1964 03 YAMAGAWA 135.0E
MARCH 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED		33	U 33	U 33	U 34	32	28	U 29	49	60	64	69	74	89	93	92	84	73	68	62	53	38	34	U 34	33
	CNT		17	20	24	26	27	29	29	29	30	30	30	30	28	29	29	28	28	27	28	28	24	21	14	14
	U Q		35	35	35	36	33	31	32	55	62	67	74	87	94	102	100	90	87	76	67	60	48	36	35	34
	L Q		32	32	32	32	30	24	26	46	56	60	63	69	79	86	86	78	69	62	58	46	34	32	32	31
foF1 10	MED										425	440	460	460	460	450	435	420								
	CNT										6	13	23	25	28	25	18	4								
foE 20	MED									200	240	280	305	320	330	330	320	310	280	240	175					
	CNT									7	27	27	25	25	24	20	21	24	23	20	2					
foEs 30	MED		24	23	24	E	E	M 22	22	21	27	G	34	38	38	37	38	38	34	31	26	29	26	30	26	23
	CNT		10	10	5	10	15	6	4	21	29	30	30	30	29	28	29	29	28	29	27	23	19	14	10	13
	U Q		26	24	29	24	23	23	24	23	29	32	37	43	44	44	43	44	38	36	32	36	32	31	49	30
	L Q		23	22	21	E	E	21	21	G	G	G	G	G	G	36	33	32	31	26	23	23	23	24	23	22
M 3000 F2 03	MED		300	U 315	310	U 315	330	310	U 325	360	360	345	335	320	320	325	330	340	340	350	355	350	340	305	U 300	310
	CNT		17	19	23	25	26	28	28	28	29	30	30	30	28	29	29	28	27	26	27	27	23	20	14	14
h'F2 04	MED										245	260	285	290	290	280	270	260	255	245	230					
	CNT										9	30	29	30	29	29	29	29	29	25	1					
h'E 24	MED																									
	CNT																									
h'F 16	MED		290	275	275	E 260	230	260	250	230	230	220	220	230	215	210	225	225	225	230	230	225	225	265	295	300
	CNT		28	29	30	30	29	22	24	29	30	30	29	26	23	24	25	25	25	28	29	29	27	23	25	25
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



TAIPEI (TAIWAN)
CHINA
LAT. 25.0N LONG.121.5E SWEEP 1.0 MC TO 25.0 MC IN 27.3 SEC TIME 120.0E
1964 03 TAIPEI 120.0E
MARCH 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED		U 38	U 36	34	33	29	30	36	57	63	70	83	100	U 110	U 120	U 124	115	U 102	81	75	66	U 55	U 50	U 43	40
	CNT		28	28	28	27	27	12	27	31	31	31	31	29	28	28	27	28	29	22	25	25	21	17	19	26
	U Q		U 42	U 42	38	36	U 33	31	40	62	67	79	89	108	U 132	U 137	U 136	130	U 124	98	87	77	U 62	U 56	U 52	45
	L Q		U 32	U 32	32	32	U 25	28	31	53	58	62	75	90	U 103	U 111	U 109	96	90	72	70	58	U 50	U 43	U 39	33
foF1 10	MED										U 430	U 450	U 450	U 450	U 450	U 450	U 450	430	400							
	CNT										2	15	22	14	18	11	2		1							
foE 20	MED																									
foEs 30	MED										32	36	38	40	38	39	35		35	32	32					
	CNT		31	31	31	31	31	31	20	18	18	24	28	27	24	26	25	27	26	24	17	30	30	30	30	30
M 3000 F2 03	MED		310	310	310	345	335	320	330	360	350	330	305	305	315	U 320	325	330	340	345	340	330	320	U 300	U 300	300
	CNT		18	19	21	24	19	7	17	31	31	30	27	24	21	U 19	19	24	22	18	22	18	10	U 7	U 11	20
	U Q		315	320	320	360	350	350	350	370	355	340	320	320	320	U 325	335	340	350	360	355	345	335	U 335	U 305	310
	L Q		295	300	300	325	320	290	320	345	335	315	295	305	310	U 310	315	320	330	340	330	320	310	U 285	U 290	290
h'F2 04	MED									240	U 255	280	310	310	295	280	275	270	250	245						
	CNT									1	24	25	27	31	31	31	29	30	29	4						
h'E 24	MED												U 113	U 119	U 113	U 117	U 121	U 117	118							
	CNT												2	1	1	1	1	2	2							
h'F 16	MED		U 280	280	280	250	U 250	240	260	230	U 230	215	U 210	U 210	U 215	205	U 210	225	225	235	225	U 230	U 230	260	U 275	285
	CNT		21	23	28	27	22	7	18	31	28	24	24	17	11	16	13	19	16	30	27	27	18	14	12	19
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

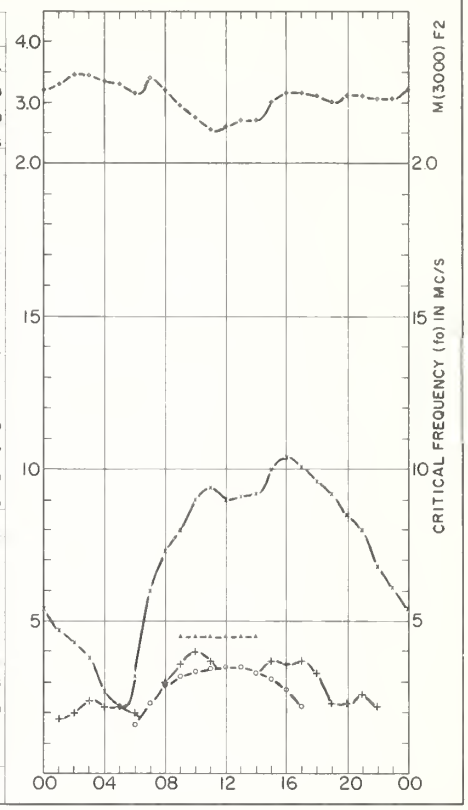


MANILA
LUZON

LAT. 14.7N LONG.121.1E SWEEP 0.25 MC TO 20.0 MC IN 27 SEC TIME 120.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	54	47	43	38	27	22	32	60	73	80	90	94	90	91	92	100	104	101	96	U S 92	85	80	68	61
	CNT	24	26	25	24	21	16	27	31	31	27	16	17	19	23	28	29	26	29	29	29	29	22	22	23
	U Q	63	58	54	46	32	30	35	64	76	85	94	101	100	97	100	106	109	103	104	100	98	87	78	70
00	L Q	48	43	36	28	16	16	30	58	69	77	86	87	84	84	88	92	93	93	90	86	82	74	66	55
foF1	MED										450	450	450	450	450	450									
	CNT										1	11	12	12	9	3									
10																									
foE	MED							U 160	U 230	U R 290	U S 320	U S 335	U S 345	U S 350	U S 350	U S 330	U S 310	U S 275	220						
20	CNT							1	28	21	17	16	13	11	13	14	12	15	12						
foEs	MED		M 18	M 20	M 24	M 22	M 22	M 20		M 30	M 36	M 40	M 37				M 37	M 36	M 37	M 33	M 23	M 23	M 26	M 22	
	CNT	30	30	30	29	29	29	29	31	31	31	31	31	31	31	31	29	30	31	31	31	31	31	31	31
30																									
M	MED	325	335	350	350	340	335	320	345	325	300	280	260	265	275	275	305	320	320	315	305	315	315	310	310
3000	CNT	21	24	22	24	18	9	27	31	31	23	14	15	14	21	26	28	24	28	27	25	25	19	21	17
F2	U Q	330	350	365	360	360	355	335	355	340	320	300	265	265	275	290	310	340	335	330	320	330	340	320	320
03	L Q	310	320	345	340	325	320	310	335	300	275	275	245	255	260	260	280	310	300	295	295	295	305	295	300
h'F2	MED								245	275	305	350	355	345	335	340	315	390	265						
	CNT								2	19	19	26	29	28	25	28	29	27	19						
04																									
h'E	MED							U 125	115	111	109	109	109	109	109	109	109	109	115						
24	CNT							1	29	30	25	25	26	21	26	20	24	24	13						
h'F	MED	250	235	220	215	240	235	255	235	225	205	200	195	190	195	190	200	225	225	250	250	245	235	235	255
	CNT	29	30	28	25	19	9	28	31	28	26	26	21	20	22	14	14	22	16	20	31	31	31	30	30
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

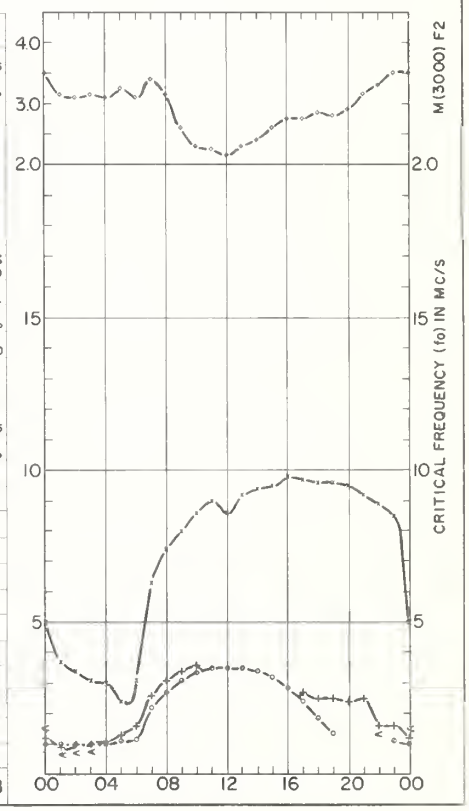


SINGAPORE
MALAYSIA

LAT. 1.3N LONG.103.8E SWEEP 0.67 MC TO 25.0 MC IN 300 SEC TIME 105.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	50	37	34	31	30	24	31	63	74	80	86	90	86	92	94	95	98	97	96	96	95	92	89	85
	CNT	23	24	27	27	26	24	24	27	24	29	24	25	27	28	28	26	26	27	24	23	24	24	22	26
00																									
foF1																									
10																									
foE	MED	100	100	100	100	100	110	115	220	270	310	335	350	350	350	340	320	285	240	185	135				J S 110
20	CNT	4	4	13	7	6	3	5	14	10	17	20	16	18	18	19	18	17	16	8	1				1
foEs	MED	E 12	E 9	E 10	E 10	11	13	16	26	31	34	36	G	G	G	G	G	G	27	25	25	24	25	E 16	16
	CNT	27	26	28	28	27	27	26	27	24	29	25	26	28	28	28	26	26	27	24	23	26	28	26	30
30																									
M	MED	355	320	315	320	315	330	315	345	320	265	235	230	220	235	245	265	280	280	290	285	295	320	335	355
3000	CNT	21	24	25	27	26	22	24	27	24	28	22	24	25	28	28	26	26	26	22	21	23	24	19	26
F2																									
03																									
h'F2																									
04																									
h'E																									
24																									
h'F																									
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



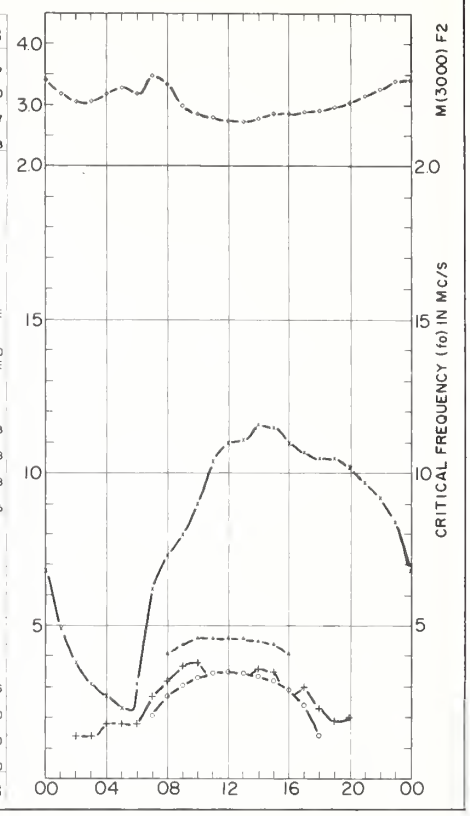
LWIRO
CONGO

LAT. 2.2S LONG. 28.8E SWEEP 1.25 MC TO 20.0 MC IN 180 SEC TIME 30.0E

1964 03 LWIRO 30.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	68	49	38	31	27	23	31	62	73	80	90	104	110	111	116	115	110	107	105	105	102	97	92	84
	CNT	30	28	30	29	25	26	27	29	29	30	30	29	31	31	31	31	31	31	31	30	29	30	29	30
	U Q	76	63	48	39	37	31	33	64	78	86	95	113	120	118	119	119	119	114	115	113	114	106	106	97
00	L Q	60	34	31	25	23	19	28	58	69	75	83	91	100	107	110	107	102	94	94	94	91	89	75	73
	MED								L	U 410	U 440	460	460	460	460	450	U 440	U 410	L	L					
foF1	CNT									15	25	26	25	23	23	20	19	11	2						
	U Q											460	460	460	460	450									
10	L Q											450	450	450	450	450									
foE	MED							E	205	270	305	330	345	350	345	335	320	290	240	140					
20	CNT							15	23	29	30	28	28	30	29	27	29	26	22	1					
	MED	E	E	14	14	18	18	18	27	32	37	38	G	G	G	36	35	G	30	23	19	20	E	E	E
foEs	CNT	30 E	30	30	30	30	30	29	29	29	30	30	29	31	31	31	31	31	31	31	30	29	30 E	30 E	30 E
	U Q		13 E	18 E	21 E	24	23	28 E	30 G	35 G	40	42 G	41 G	41 G	42 G	39 G	39 G	35 G	33 G	27	27	27 E			
30	L Q					14	14				35									18	16				
M 3000 F2	MED	345	322	309	310	322	332	323	352	338	303	290	284	278	277	282	290	290	293	295	301	308	319	330	343
	CNT	29	25	24	25	23	25	27	29	29	30	30	29	31	31	31	31	31	31	31	30	29	29	28	28
	U Q	352	339	325	321	331	346	336	359	347	321	298	293	294	289	292	296	298	300	307	305	314	334	337	358
03	L Q	327	293	298	301	309	319	307	336	315	294	282	269	269	271	272	283	285	288	289	290	299	297	318	326
	MED								250	270	300	320	335	345	345	335	310	308	285	260					
h'F2	CNT								26	28	29	29	28	29	31	31	31	31	28	13					
	U Q								260	280	315	370	365	365	365	345	330	315	305	280					
04	L Q								240	260	280	305	325	305	320	305	300	275	275	250					
h'E	MED							E	115	111	111	111	111	111	111	111	111	111	113	131					
24	CNT								17	15	14	17	17	15	15	18	23	22	15	4					
	MED	200	U 207	235	U 240	240	U 237	242	230	220	210	207	200	195	187	190	202	U 210	227	250	255	245	220	212	205
h'F	CNT	30	30	28	29	24	25	26	27	27	28	28	28	27	26	27	28	25	26	29	30	29	30	30	30
	U Q	210		240					230	225	220					200				255	265	250	240	235	210
16	L Q	190	200	222	227	230	230	235	225	215	207	205	200	190	185	180	195	200	225	245	245	225	210	205	200
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



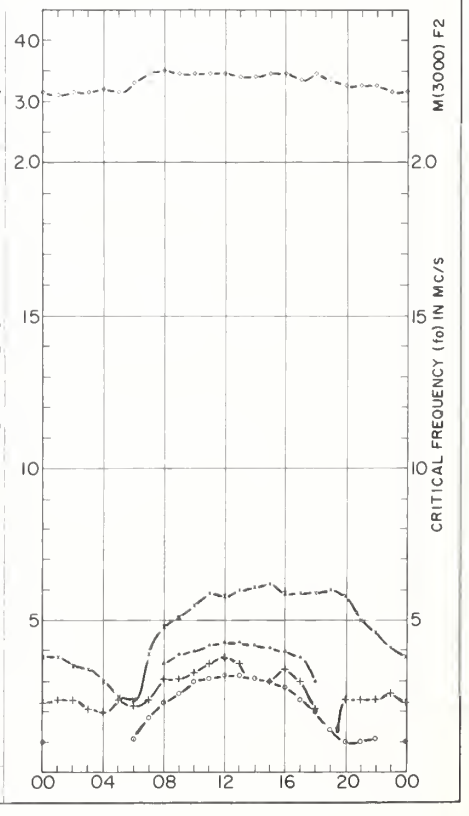
GODLEY HEAD
NEW ZEALAND

LAT. 43.6S LONG. 172.8E SWEEP 1.0 MC TO 22.0 MC IN 7 SEC TIME 180.0E

1964 03 GODLEY HEAD 180.0E

MARCH 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	38	35	34	30	25	24	39	48	51	55	59	58	60	61	62	59	59	59	60	58	50	46	41
	CNT	24	23	23	22	25	22	24	27	25	26	26	25	25	26	26	22	29	29	30	28	30	27	27	25
00																									
	MED									U L 360	390	400	420	430	430	420	U L 410	U L 400	U L 380	U L 300					
foF1	CNT									4	17	25	24	24	25	25	20	14	7	2					
10																									
foE	MED	100	E	E	E	E	E	110	180	230	260	300	310	320	320	310	300	280	240	200	140	J S 100	100	110	E
20	CNT	2	3	7	5	9	11	13	22	23	22	21	18	22	27	23 G	19	25	26	25	18 G	2	3	2	1
	MED	23	24	24	21	20	24	22	24	31	31	33	36	38	36		30	34	30	21		24	24	24	26
foEs	CNT	29	29	29	29	28	28	28	27	28	27	26	26	26	27	27	22	30	30	30	30	30	30	30	30
30																									
M 3000 F2	MED	320	315	320	320	325	320	335	350	355	350	350	350	350	345	345	350	350	340	350	340	330	330	330	320
	CNT	24	23	23	22	25	21	23	27	24	23	25	25	25	26	26	22	29	28	29	27	29	27	26	24
03																									
	MED								240	260	270	300	290	300	300	290	280	280	270	250					
h'F2	CNT								3	24	25	26	26	26	26	26	22	26	24	12					
04																									
h'E	MED							110	110	105	105	100	100	100	100	100	100	105	105	110	110				
24	CNT							1	11	25	26	26	25	25	27	26	18	27	26	14	1				
	MED	270	270	270	260	250	260	260	240	230	220	210	200	200	210	220	220	220	230	240	240	240	250	260	270
h'F	CNT	27	25	26	25	28	22	24	25	24	21	22	20	19	25	23	18	22	26	27	28	29	27	28	28
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



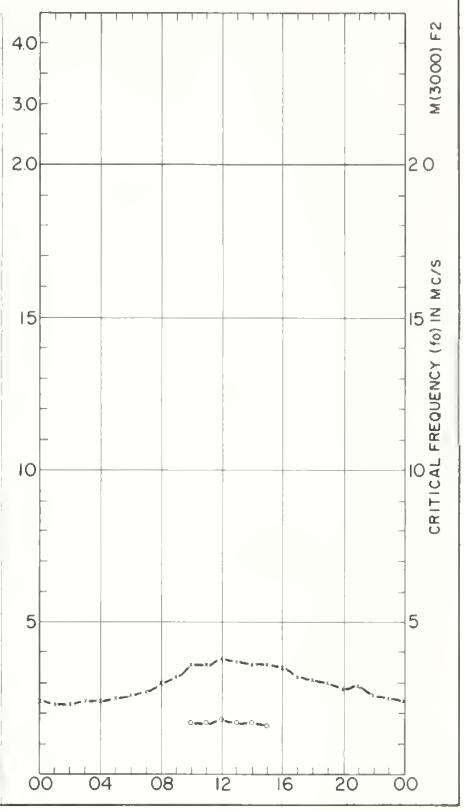
RESOLUTE BAY
CANADA

LAT. 74.7N LONG. 94.9W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 90.0W

1964 02 RESOLUTE BAY 90.0W

FEBRUARY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
			F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
foF2	MED		24	23	23	24	24	25	26	27	30	32	36	36	38	37	36	36	35	32	31	30	28	29	26	25
	CNT		20	24	24	23	24	22	23	23	24	23	27	26	27	24	25	24	23	23	21	25	28	21	21	21
	U Q		27	26	28	27	56	28	29	32	33	37	40	41	42	40	39	38	36	37	35	35	30	30	30	28
00	L Q		20	20	20	20	20	20	20	24	28	28	30	32	33	35	32	32	30	30	27	27	25	26	22	28
foF1																										
10																										
foE	MED												U 170	170	180	170	U 170	U 160								
20	CNT										2	4	7	12	14	10	7	5								
foEs																										
30																										
M 3000 F2																										
03																										
h'F2	MED														U 290											
	CNT												2	2	5	2	1									
04																										
h'E																										
24																										
h'F	MED		260	260	250	250	260	260	260	250	250	250	250	240	240	240	240	240	240	240	240	250	240	250	255	260
	CNT		18	23	24	24	24	23	21	23	21	26	28	27	29	27	26	27	27	27	25	23	22	18	21	21
16																										
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



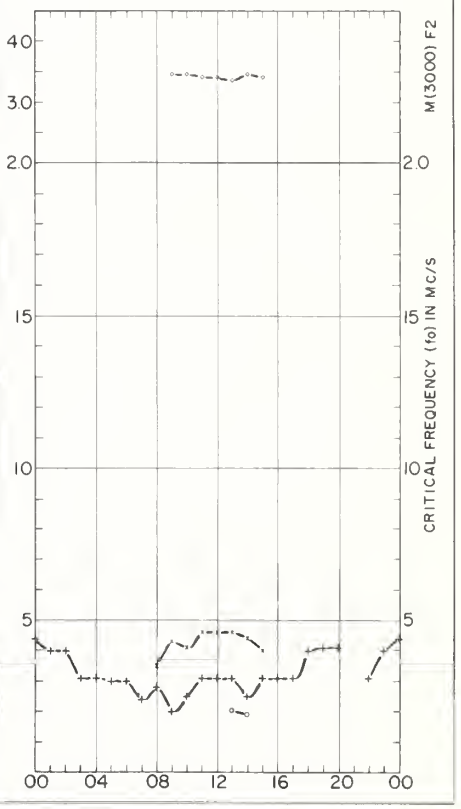
TROMSO
NORWAY

LAT. 69.7N LONG. 19.0E SWEEP 0.7 MC TO 25.0 MC IN 300 SEC TIME 15.0E

1964 02 TROMSO 15.0E

FEBRUARY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	MED										35	43	41	46	46	46	44	40								
foF2	CNT			1	1	3	2		2	1	5	11	15	12	16	17	13	6	1	2	1					
	U Q										42	45	48	48	49	52	45	44								
00	L Q										27	31	37	45	43	44	41	35								
foF1																										
10																										
foE	MED														205	190										
20	CNT											1	2	2	4	5	6	1								
	MED		44	40	40	31	31	30	30	24	28	20	25	31	31	31	25	31	31	31	40	41	41		31	40
foEs	CNT		16	21	18	16	10	9	10	7	10	15	12	14	12	14	13	20	21	18	23	24	22		20	22
	U Q		50	42	54	45	36	30	31	31	28	30	31	31	31 G	31 G	31 G	31	31	39	55	47	60		39	44
30	L Q		31	31	31	28	29	25	27	14	18	20	18	30	27	30		26	24	17	31	31	31		31	31
M	MED											350	350	345	345	340	350	345								
3000	CNT										2	7	15	12	15	17	12	5	2							
F2	U Q											365	355	350	350	350	350	350								
03	L Q											330	335	325	320	335	335	335								
h'F2	MED																									
	CNT											1		1	1											
04																										
h'E	MED																									
24	CNT										1	2	2	2	2	1	3	2								
	MED									250	240	235	235	235	240	240	230	225	230	240	240					
h'F	CNT					1	1		1	5	8	17	20	15	16	22	22	22	17	11	5	1				
	U Q									255	240	240	240	235	240	240	235	235	240	250	245					
16	L Q									235	230	220	220	235	225	225	225	220	215	320	215					
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



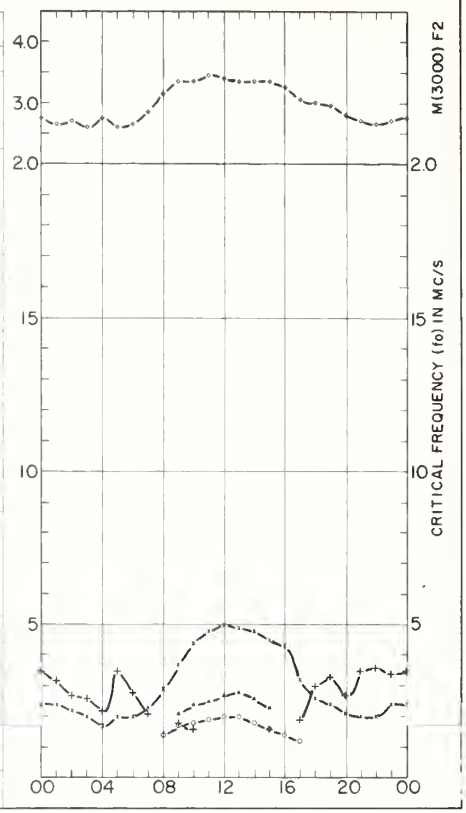
KIRUNA
SWEDEN

LAT. 67.8N LONG. 20.4E SWEEP 0.8 MC TO 15.0 MC IN 30 SEC TIME 15.0E

1964 02 KIRUNA 15.0E

FEBRUARY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		24	24	22	20	17	20	20	23	29	37	44	48	50	49	48	45	43	32	26	24	21	20	20	24
	CNT		6	7	12	14	9	6	8	15	24	27	27	26	28	27	27	27	22	19	10	8	8	9	6	4
	U Q		28	27	24	22	22	24	24	28	38	45	48	50	52	54	52	49	47	46	30	26	24	24	24	26
00	L Q		23	19	20	19	14	16	19	18	27	34	40	45	46	45	44	37	35	27	22	20	18	17	20	20
foF1	MED											210	240	250	270	280	260	230								
	CNT											1	5	10	6	7	6	2								
10																										
foE	MED										140	170	180	190	200	200	180	160	140	120						
20	CNT										6	11	15	21	19	18	16	13	7	1						
foEs	MED		35	32	27	26	22	35	28	21		18	16					16		19	30	33	27	35	36	34
	CNT		24	22	22	16	15	13	6	10	19	22	23	24	24	22	24	24	20	15	21	21	23	23	20	22
30																										
M	MED		280	270	275	265	280	265	270	290	320	340	340	350	345	340	340	340	330	310	305	300	285	275	270	275
3000	CNT		6	6	12	14	8	6	7	15	23	26	27	26	28	27	27	27	22	19	10	8	8	8	6	4
F2	U Q		280	280	280	280	280	290	290	300	330	350	350	350	350	350	350	350	330	330	320	305	300	280	270	290
03	L Q		270	260	260	250	270	260	260	270	310	320	330	340	340	330	330	330	320	290	300	275	280	265	250	265
h'F2	MED											220	225	225	230	235	235	235								
	CNT											2	6	13	14	11	8	3								
	U Q												225	240	240	245	250	240								
04	L Q												220	220	225	225	220	230								
h'E	MED										E 120	U 110	U 115	U 110	U 110	E 110	E 120	E 130	E 140							
24	CNT										4	6	11	12	11	11	11	8	4							
h'F	MED		310	310	325	310	310	U 300	320	250	230	220	215	215	215	215	U 220	220	220	220	240	265	290	320	325	U 320
	CNT		9	10	16	16	11	6	7	16	24	27	27	27	28	26	28	28	26	22	17	13	10	9	12	11
	U Q		355	360	380	355	350	U 330	335	275	250	225	225	220	225	225	220	225	230	240	250	295	300	370	340	U 350
16	L Q		300	295	310	300	300	U 280	310	240	220	215	210	210	210	210	U 210	215	210	220	220	250	260	295	295	U 265
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



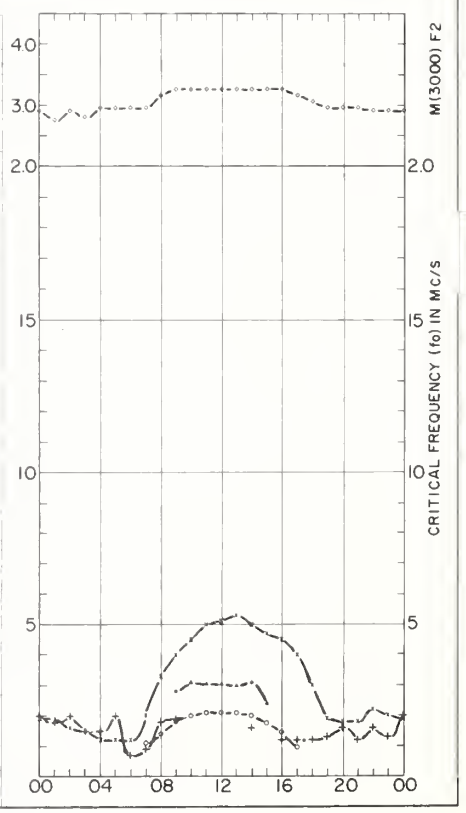
LYCKSELE
SWEDEN

LAT. 64.7N LONG. 18.8E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

1964 02 LYCKSELE 15.0E

FEBRUARY 1964

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		19	19	16	15	12	12	12	20	33	40	45	50	51	53	50	47	45	40	30	19	18	18	22	20
	CNT		10	15	23	22	24	18	20	28	29	29	29	29	29	28	27	28	28	26	23	17	14	16	10	8
	U Q		21	22	20	17	17	18	15	28	38	46	50	51	56	56	55	52	50	45	36	24	21	25	25	24
00	L Q		12	17	10	10	10	10	11	18	27	36	42	48	46	48	48	45	40	33	23	18	17	12	17	14
foF1	MED											280	310	305	305	300	310	240								
	CNT											1	5	10	12	15	6	1								
10																										
foE	MED									110	140	180	200	210	210	210	200	175	145	95						
20	CNT									10	19	20	23	27	21	24	21	16	12	2						
foEs	MED		20	18	20	15	15	20	7	9	18	19					16		12	12	12	13	16	12	16	13
	CNT		26	28	27	25	23	15	16	17	22	27	27	27	28	25	23	23	24	17	16	19	24	25	26	25
30																										
M	MED		295	280	295	285	300	300	300	300	320	330	330	330	330	330	330	330	330	320	310	300	300	300	295	295
3000	CNT		8	14	19	20	21	10	13	28	28	29	28	28	28	27	27	28	28	25	21	14	12	11	8	8
F2	U Q		300	290	300	300	300	300	305	310	330	330	340	340	340	340	340	340	330	320	315	310	300	300	300	300
03	L Q		285	280	280	280	280	290	300	285	310	320	320	320	325	330	330	330	320	310	300	290	285	280	275	285
h'F2	MED											250	250	240	240	235	240	240								
	CNT											4	8	10	10	15	6	1								
	U Q											260	255	250	245	240	240									
04	L Q											245	230	230	230	225	240									
h'E	MED					120				110	105	100	100	100	100	100	100	100	100	100						
24	CNT					1				5	14	16	14	12	10	10	9	7	6	3						
h'F	MED		U 300	U 310	U 300	U 300	U 300	U 285	U 265	U 250	235	220	220	215	U 215	U 220	220	220	220	215	U 235	U 250	U 250	U 275	290	305
	CNT		10	15	18	19	20	13	17	27	29	29	29	29	29	28	27	28	28	27	26	19	11	U 13	7	4
	U Q		U 325	U 340	U 320	U 300	U 330	U 295	U 300	U 270	250	230	230	230	U 220	U 230	230	235	230	230	240	250	270	U 290	315	325
16	L Q		U 290	U 275	U 270	U 255	U 265	U 250	U 235	240	220	215	210	200	U 210	U 210	210	215	210	205	220	225	U 240	E 260	270	300
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



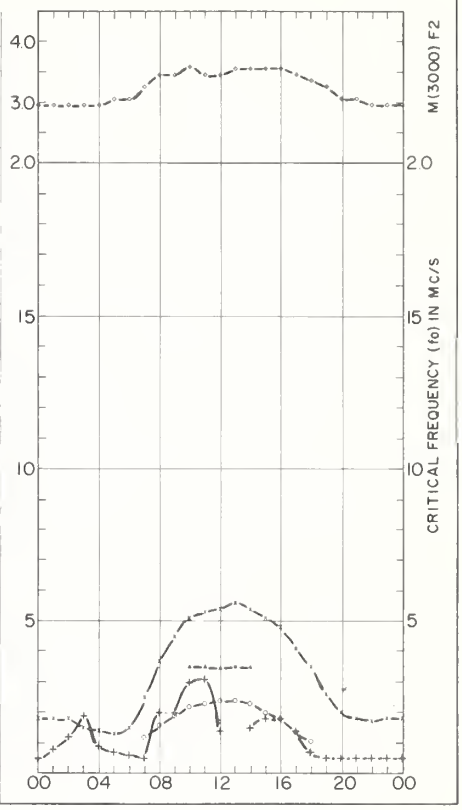
UPPSALA
SWEDEN

LAT. 59.8N LONG. 17.6E SWEEP 0.33 MC TO 20.0 MC IN 180 SEC TIME 15.0E

1964 02 UPPSALA 15.0E

FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	18	18	18	15	14	13	15	25	37	45	51	53	54	56	54	51	48	41	35	26	20	18	17	18
	CNT	18	24	21	23	16	17	18	29	29	29	29	29	29	29	29	29	29	29	28	27	25	24	22	19
	U Q	20	20	20	17	15	14	16	29	42	50	56	56	59	60	57	56	51	49	42	33	26	20	20	21
00	L Q	18	15	16	14	12	13	13	16	32	42	48	48	51	51	52	49	45	36	28	20	15	15	15	15
foF1	MED											350	350	345	350	350									
	CNT											3	10	12	10	3									
10																									
foE	MED								120	160	190	220	230	240	240	230	200	180	135	105					
20	CNT								18	21	24	19	21	25	27	24	27	17	8	1					
foEs	MED	5	8	12	19	9	7	6	5	20	20	30	31	14		15	18	18	14	7	5	5	5	5	5
	CNT	28	29	29	27	27	21	20	29	28	29	29	29	29	29	29	29	28	25	20	17	22	19	18	22
30																									
M	MED	300	300	300	300	300	310	310	330	350	350	363	350	350	360	360	360	360	350	340	330	310	310	300	300
3000	CNT	15	21	21	23	16	15	13	23	29	29		28	29	29	28	28	29	29	28	24	23	17	12	11
F2	U Q	310	300	305	310	310	320	325	330	360	360	370	360	360	370	370	370	360	360	350	340	330	320	310	310
03	L Q	300	285	290	290	290	300	290	320	340	350	350	340	350	350	350	350	350	340	330	320	300	300	290	290
h'F2	MED											245	240	240	235	230									
	CNT											5	12	18	15	6									
	U Q											250	250	250	245	235									
04	L Q											220	225	235	225	210									
h'E	MED								110	110	105	U 100	U 100	U 100	U 100	U 105	U 110	110	130						
24	CNT								4	11	18	21	17	27	25	21	15	9	3						
h'F	MED	E 270	U 260	U 250	E 250	E 250	E 250	U 235	U 240	210	205	205	200	205	205	210	210	205	200	210	U 220	U 240	U 245	E 260	E 255
	CNT	6	18	18	16	5	4	5	23	29	29	27	28	27	29	29	29	29	29	29	23	16	10	8	6
	U Q	U 265	U 265	U 260	U 250	E 260	E 260	E 260	U 250	220	210	210	210	210	210	210	215	210	205	220	U 240	U 250	U 250	E 285	U 250
16	L Q	E 250	E 255	E 245	E 240	E 240	E 235	E 230	E 210	205	200	200	200	200	200	200	205	205	200	200	U 210	U 220	E 240	E 260	E 250
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



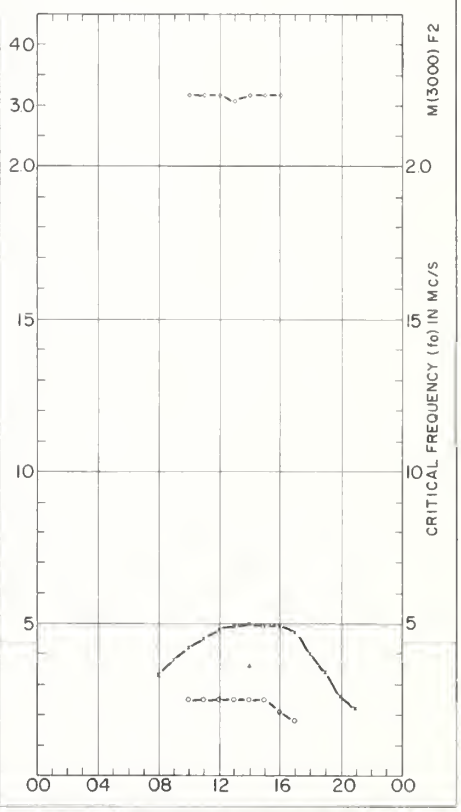
CHURCHILL
CANADA

LAT. 58.8N LONG. 94.2W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 90.0W

1964 02 CHURCHILL 90.0W

FEBRUARY 1964

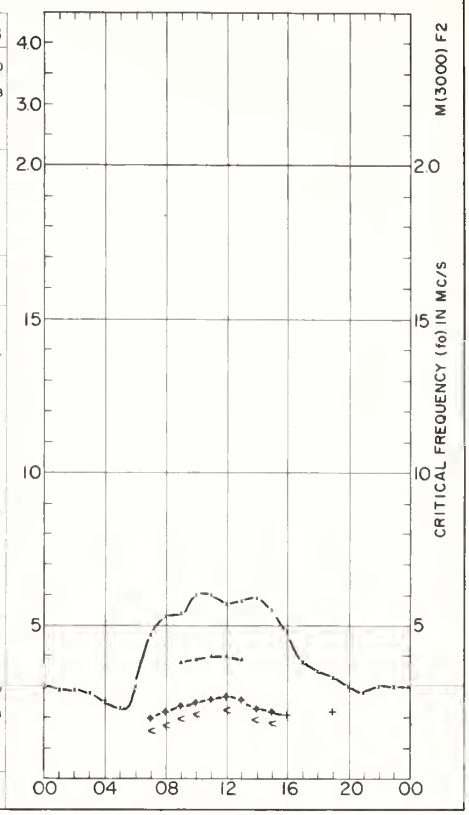
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	MED									U F 33	38	42	45	48	49	F 50	F 49	F 49	F 47	F 40	F 34	F 26	F 22		
foF2	CNT		1	2	2	1	1		1	7	14	16	20	21	22	26	27	26	26	22	14	14	10	2	3
	U Q									36	38	44	46	49	52	52	52	50	50	43	38	34	29		
00	L Q									30	37	40	43	44	48	46	47	44	41	36	25	25	20		
	MED															U L 360									
foF1	CNT											1	3	4		5	2	1							
10																									
foE	MED											U A 250	U 250	U B 250	U B 250	B 250	B 250	A 210	U A 180						
20	CNT										2	5	8	9	7	11	12	16	9						
foEs																									
30																									
M	MED											U 320	U 320	U 320	310	U 320	U 320	U 320							
3000	CNT										4	5	5	6	10	6	9	6	1	1					
F2																									
03																									
	MED											U 300	305	300	310	305	290	U 295							
h'F2	CNT										2	5	10	14	16	21	19	8	1						
04																									
h'E																									
24																									
	MED									U 250	A 240	C 235	B 240	B 250	235	240		250	260	A 260	A 270	U A 290			
h'F	CNT		1		1		1			4	5	10	11	13	11	15	19	23	24	17	11	9	3	1	1
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



PRUHONICE
CZECHOSLOVAKIA LAT. 50.0N LONG. 14.6E SWEEP 1.0 MC TO 18.0 MC IN SEC TIME 0.0

FEBRUARY 1964

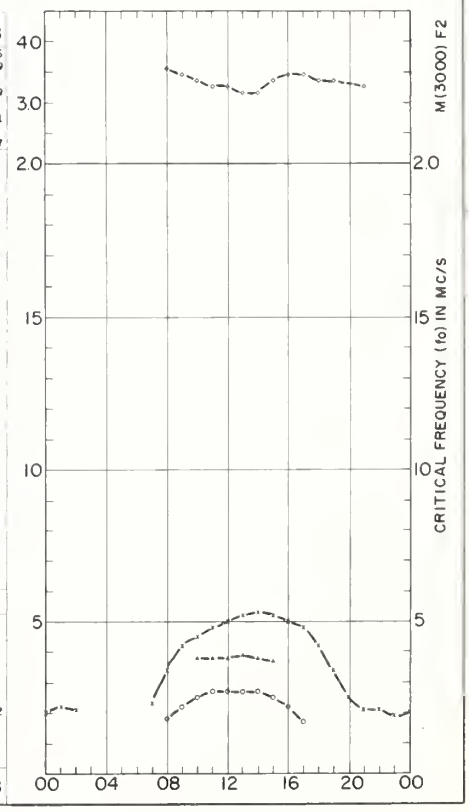
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	30	29	29	28	25	23	30	47	53	54	60	60	57	58	59	55	48	38	35	33	30	28	30	30
	CNT	28	26	28	28	26	20	25	27	27	26	27	27	26	29	28	28	28	27	27	19	16	15	15	18
foF1 10	MED										380	390	400	400	390										
	CNT								1		4	8	9	6	11	1									
foE 20	MED								200	220	240	250	260	270	260	230	220								
	CNT								9	20	18	18	12	7	12	23	14	2							
foEs 30		E	E	E	E				E G	E G	E G	E G	E G		E G		E G	E G							
	MED								20	22	24	25	26	27	26	23	22	21			22				
	CNT	15	18	23	21	3	1	2	10	22	19	22	17	9	17	20	23	7	2	2	4			1	1
M 3000 F2 03																									
h'F2 04	MED										245	250	250	250	250	250									
	CNT								1		8	10	14	7	16	9	1								
h'E 24	MED								135	115	105	105	105	105	105	110	115								
	CNT								9	20	19	18	14	9	13	24	14	2							
h'F 16	MED	260	260	250	250	250	240	230	215	215	225	210	220	230	225	225	220	210	215	245	240	270	255	250	260
	CNT	25	21	24	25	17	9	20	22	26	14	18	14	15	15	21	27	25	22	16	14	11	9	11	13
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



KENORA
CANADA LAT. 49.8N LONG. 94.4W SWEEP 1.0 MC TO 16.0 MC IN 20 SEC TIME 90.0W

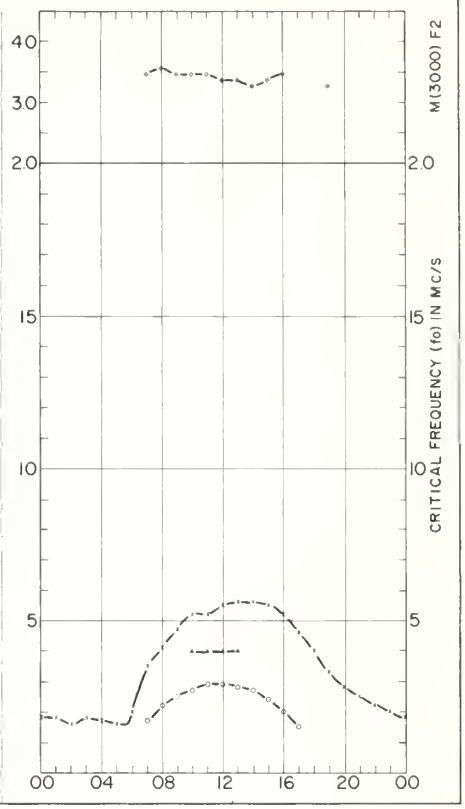
FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	U S 20	U 22	U S 21					23	34	42	45	48	50	52	53	52	50	48	42	34	25	21	U S 21	U S 19
	CNT	7	7	6	3	3	1	2	15	28	29	28	28	29	29	28	28	28	29	28	28	25	22	11	9
	U Q	23	24	22					25	37	44	48	50	52	54	55	54	52	51	46	37	28	23	23	21
	L Q	15	20	20					20	32	38	42	45	46	48	48	48	46	45	38	28	20	19	19	17
foF1 10	MED											U 380	U 380	U L 380	U L 390	U L 380	U L 370								
	CNT											9	7	15	18	14	7	2							
foE 20	MED									180	220	250	270	270	270	270	250	220	170						
	CNT								1	20	25	27	26	26	26	22	24	23	19						
foEs 30																									
M 3000 F2 03	MED									U 360	350	U 340	U 330	330	320	320	340	350	350	340	U 340		330		
	CNT								1	6	10	7	9	17	21	20	20	20	23	13	7	3	5		
h'F2 04	MED										275	290	300	300	300	280	260	255							
	CNT										11	17	23	27	28	28	26	18	1						
h'E 24																									
h'F 16	MED								U 265	230	205	200	200	200	200	200	200	210	230	220	240	255	U 295		
	CNT	4	2	1	1	1	1	2	8	28	29	26	25	27	26	24	24	25	28	28	27	18	8	2	2
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



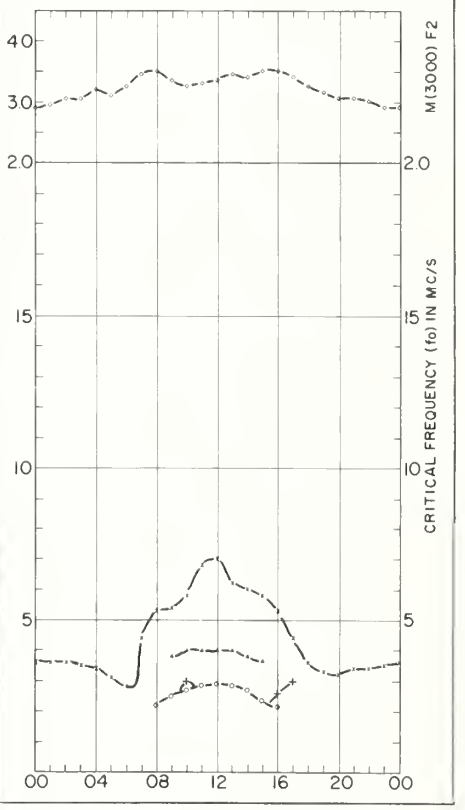
ST JOHNS
NEWFOUNDLAND
LAT. 47.6N LONG. 52.7W
SWEEP 1.0 MC TO 16.0 MC IN 20 SEC TIME 60.0W
1964 02 ST JOHNS 60.0W
FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		S	S	J S	S	S	S	S											S			F			S
foF2 00	MED	18	18	16	18	17	16	20	35	41	47	52	52	55	56	56	55	52	46	40	33	28	25	22	20
	CNT	18	18	15	10	10	10	16	27	27	27	28	28	29	29	28	28	29	28	28	29	27	25	24	19
	U Q	20	20	18	20	20	18	22	40	45	50	56	55	62	60	59	58	54	50	46	37	30	27	25	22
	L Q	16	15	15	16	14	14	20	31	40	43	48	50	52	52	55	52	49	42	36	30	25	22	20	17
foF1 10	MED											U 400	L 400	U 400	L 400										
	CNT									1	1	8	12	14	7	2									
foE 20	MED								170	220	250	270	290	290	280	270	240	200	150						
	CNT								22	23	25	27	27	28	28	25	24	23	14						
foEs 30																									
M 3000 F2 03	MED								350	360	350	350	350	340	340	330	340	350			U 330				
	CNT			1	1	1			12	11	12	13	11	18	21	19	13	11	4	3	5	1	1	1	
h'F2 04	MED									U 250	270	270	280	275	270	270	250	230							
	CNT								1	7	19	28	26	29	27	27	25	11							
h'E 24																									
h'F 16	MED	U 300	U 300					U 270	230	205	200	200	200	195	190	200	200	225	220	260	240	260	290	300	U 300
	CNT	6	6	2	4	4	4	9	27	27	27	28	28	28	27	26	25	28	28	28	28	25	18	17	9
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



WAKKANAI
JAPAN
LAT. 45.4N LONG. 141.7E
SWEEP 1.0 MC TO 18.0 MC IN 40 SEC TIME 135.0E
1964 02 WAKKANAI 135.0E
FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	36	36	36	35	34	31	28	44	53	54	58	68	70	62	60	58	53	44	36	33	32	34	34	35
	CNT	17	16	17	15	20	17	19	25	25	22	23	22	22	23	23	24	22	21	23	23	23	19	20	15
	U Q	39	40	42	39	38	35	33	48	58	60	63	76	73	71	64	64	55	50	39	38	34	37	36	38
	L Q	33	34	33	31	30	28	24	40	48	50	56	61	65	60	58	56	50	40	32	30	29	30	32	33
foF1 10	MED										380	400	400	400	400	380	365								
	CNT										5	15	21	21	23	21	6								
foE 20	MED				E					220	250	270	285	290	285	270	235	215							
	CNT				1					14	18	18	18	19	21	22	18	1							
foEs 30	MED	E	E	E	E	E	E	E		G	G	30	G	G	G	G	G	26	30	E	E	E	E	E	E
	CNT	24	25	25	25	25	25	3		18	20	23	21	21	23	23	18	4	5	23	23	24	25	24	25
	U Q	E	22	22	22	E	E	24		26	32	34	32	30	G	G	G	30	35	E	E	E	E	E	E
	L Q	E	E	E	E	E	E	E		G	G	G	G	G	G	G	G	G	28	E	E	E	E	E	E
M 3000 F2 03	MED	295	300	310	310	325	315	330	350	355	340	330	335	340	350	345	355	355	345	330	320	310	310	305	295
	CNT	17	16	17	15	20	17	19	25	25	22	23	22	22	23	23	24	22	21	23	23	23	19	20	16
h'F2 04	MED										260	260	265	255	250	250	250								
	CNT										5	15	21	21	23	21	6								
h'E 24																									
h'F 16	MED	300	280	270	250	240	240	255	225	225	210	215	225	220	215	220	230	220	220	240	250	275	280	295	300
	CNT	25	25	25	25	25	25	25	25	24	22	23	22	22	23	23	24	23	22	23	23	25	25	25	25
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



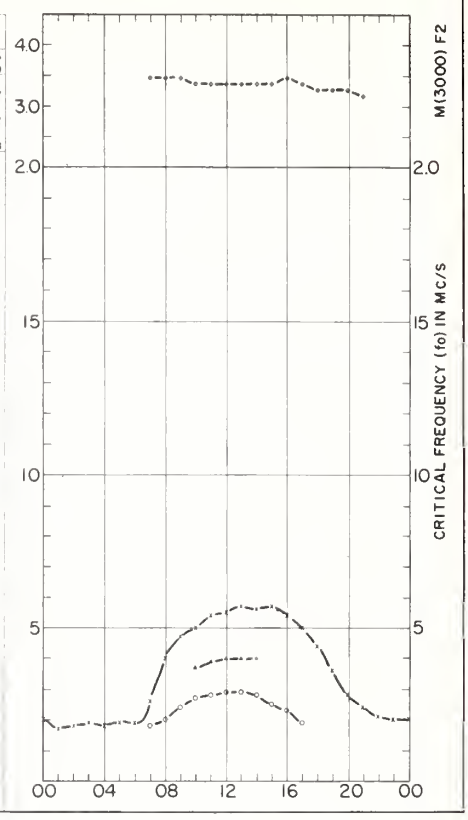
OTTAWA
CANADA

LAT. 45.4N LONG. 75.9W SWEEP 1.0 MC TO 16.0 MC IN 16 SEC TIME 75.0W

1964 02 OTTAWA 75.0W

FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	S 20	J S 17	J S 18	J S 19	J S 18	U S 19	U S 19	26	40	47	50	54	55	57	56	57	54	50	44	36	28	24	21	S 20
	CNT	16	15	12	9	11	5	5	28	29	29	29	29	29	29	29	29	28	28	29	29	28	27	22	17
	U Q	23	24	20	20	21	21	20	32	42	50	52	57	59	59	60	60	58	52	48	42	34	27	24	22
	L Q	17	16	16	16	16	16	18	23	39	43	46	52	52	54	52	54	51	47	47	32	26	22	20	18
foF1 10	MED											U 370	390	U L 400	U L 400	U 400									
	CNT										1	7	11	17	16	6	2	1							
foE 20	MED							U 180	200	240	270	280	290	290	280	250	230	190							
	CNT							6	26	28	29	26	25	24	25	27	26	22							
foEs 30																									
M 3000 F2 03	MED							U 350	350	350	340	340	340	340	340	340	340	350	340	330	330	U 330	320		
	CNT							6	17	18	17	22	21	23	23	25	24	22	16	15	12	6	2		
h'F2 04	MED									240	270	270	280	275	270	270	240								
	CNT									3	22	27	29	29	29	29	26	24	4						
h'E 24																									
h'F 16	MED								240	215	200	195	200	195	200	200	200	205	215	215	235	250	270	280	U 300
	CNT	4	4	3	1	1	1	1	26	29	27	29	27	29	29	28	25	26	28	29	29	27	20	12	7
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



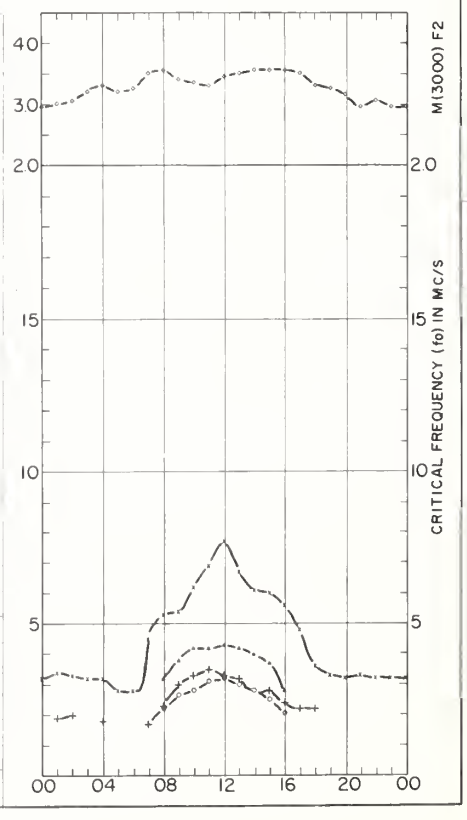
AKITA
JAPAN

LAT. 39.7N LONG. 140.1E SWEEP 1.6 MC TO 20.0 MC IN 20 SEC TIME 135.0E

1964 02 AKITA 135.0E

FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	32	34	33	32	32	28	28	45	53	54	62	69	77	67	61	60	56	48	36	33	32	33	32	32
	CNT	15	14	17	18	19	19	24	27	27	27	28	29	29	29	29	29	29	29	29	27	27	26	22	16
	U Q	36	39	38	33	34	31	34	51	58	60	67	78	83	74	68	62	61	54	40	38	36	35	35	36
	L Q	31	33	32	30	30	25	24	41	47	52	56	62	70	62	58	58	51	42	31	31	28	28	30	30
foF1 10	MED									320	380	420	420	430	420	400	370	280							
	CNT									5	11	25	29	28	28	28	17	3							
foE 20	MED								E 8	U 220	265	280	310	320	300	U 280	250	205							
	CNT	E			E		E	E		3	4	2	5	7	13	14	7	2			E	E	E	E	E
foEs	MED		19	20		18			17	23	30	33	35	33	32	G	28	24	22	22					
	CNT	29	27	28	28	28	27	27	27	27	26	28	29	28	28	29	29	29	28	29	28	29	29	29	29
	U Q	22 E	22 E	21 E	22 E	22 E	21 E	21 E	23 G	27 G	32	35	36	36	35 G	33 G	32 G	30 G	23 E	26 E	24 E	22 E	19 E	20 E	22 E
30	L Q										28	32	32	31											
M 3000 F2 03	MED	300	305	310	325	335	325	330	355	360	345	340	335	350	355	360	360	360	355	335	330	320	300	310	300
	CNT	15	14	17	18	19	19	24	27	27	27	28	29	29	29	29	29	29	29	29	27	27	26	22	16
h'F2 04	MED									235	255	280	275	255	255	250	250	240							
	CNT									8	24	28	29	29	29	29	29	21							
h'E 24																									
h'F 16	MED	295	290	265	255	240	250	250	225	230	220	220	225	220	220	215	220	225	220	230	245	245	270	275	285
	CNT	28	26	27	27	27	26	22	27	27	27	28	29	29	28	28	28	29	29	28	29	29	26	26	29
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



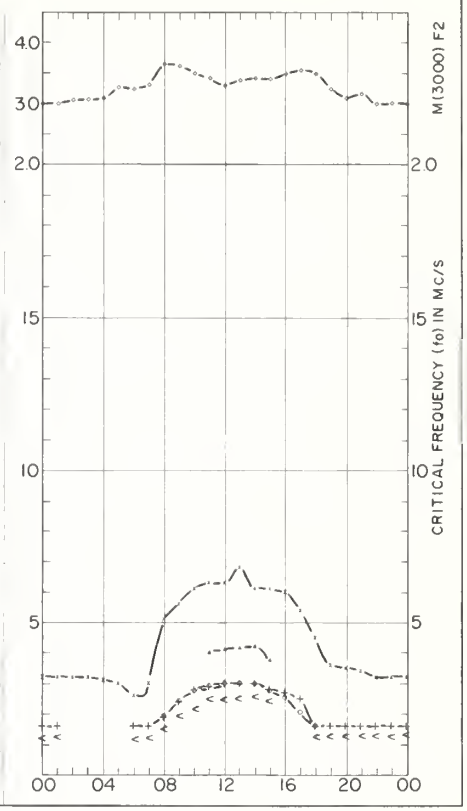
ATHENS
GREECE

LAT. 38.0N LONG. 23.6E SWEEP 1.0 MC TO 20.0 MC IN 30 SEC TIME 30.0E

1964 02 ATHENS 30.0E

FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	32	32	32	32	31	30	26	30	51	56	61	63	63	68	61	61	60	54	45	36	35	34	32	32
	CNT	24	25	26	23	25	23	24	26	24	25	27	27	25	27	27	27	26	23	27	24	26	23	24	22
	U Q	34	34	34	34	32	32	30	35	56	60	66	67	68	72	68	66	68	60	52	38	38	37	36	35
00	L Q	30	29	30	30	28	28	25	27	48	52	56	56	59	61	58	55	57	51	41	32	32	31	31	30
foF1	MED												400	410	415	420	375								
	CNT												3	5	6	3	1								
	U Q												U L 410	455	420	430									
10	L Q												390	400	410	410									
foE	MED																			E S 160					
20	CNT																								
foEs	MED	E S E S 16		E	E	E		E E S 16	S 16	E G 19	E G 24	E G 28	E G 29	E G 30	E G 30	E G 30	E G 28	E G 27	E G 25	E S 16	E S 16	E S 16	E S 16	E S 16	E S 16
	CNT	E S 26	E S 25	E S 26	E S 25	E 26	E 26	E S 25	E S 26	24	25	27	27	27	27	27	27	27	26	27	27	27	26	E S 26	26
	U Q	E S 16	E S 16	E S 16	E 21	E	E	E S 16	E S 16	E S 21	E G 28	E G 30	E G 34	E G 34	E G 33	E G 33	E G 31	E G 32	E G 27	E S 22	E S 23	E S 25	E S 16	E S 22	E S 22
30	L Q	E S 16	E S 16	E S	E	E	E	E S 16	E S 16	E S 16	E G 24	E G 28	E G 29	E G 30	E G 30	E G 30	E G 28	E G 25	E G 21	E S 16	E S 16	E S 16	E S 16	E S 16	E S 16
M	MED	303	303	309	310	312	330	327	334	368	365	353	345	333	342	345	344	352	358	352	327	312	319	303	304
3000 F2	CNT	24	25	26	23	25	23	24	26	24	25	27	27	25	27	27	27	26	23	27	24	26	23	24	22
	U Q	310	314	314	317	321	341	341	344	378	378	372	372	355	357	352	352	362	369	362	340	326	333	323	316
03	L Q	297	296	300	303	303	316	316	324	358	347	336	326	326	334	337	336	342	345	340	318	300	304	291	297
h'F2	MED												245	260	240	250	250								
	CNT												3	5	6	3	1								
	U Q												260	295	250	250									
04	L Q												220	230	235	240									
h'E	MED																			E S 185					
24	CNT																								
h'F	MED	E S 255	E S 260	E S 250	E S 240			E S 225	E S 220	210	210	205	195	205	200	210	205	210	210	200	E S 210	E S 240	E S 230	E S 240	E S 260
	CNT	26	25	26	25	26	26	25	26	24	25	27	27	27	27	27	27	27	26	27	27	27	26	26	26
	U Q	E S 265	E S 280	E S 250	E S 250	E S 240		E S 250	E S 230	220	220	215	210	220	210	215	210	220	215	210	E S 215	E S 250	E S 240	E S 260	E S 265
16	L Q	E S 245	E S 250	E S 240	E S 230	230	210	E S 205	210	200	195	195	190	195	185	190	190	195	205	200	E S 205	E S 210	E S 220	E S 225	E S 240
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



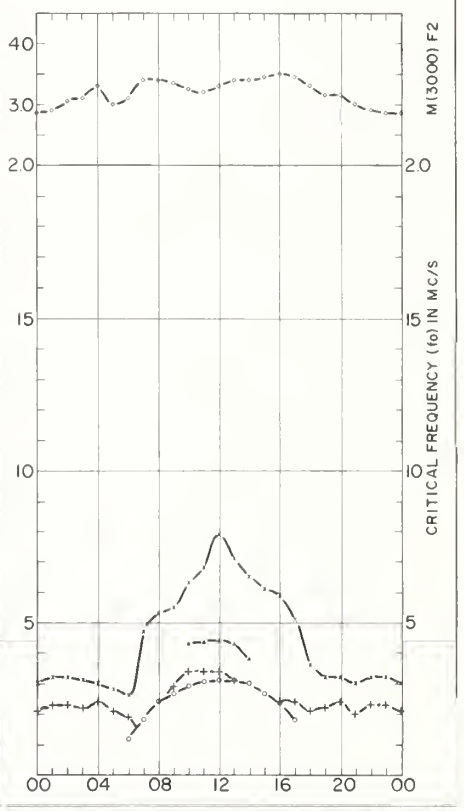
KOKUBUNJI
JAPAN

LAT. 35.7N LONG.139.5E SWEEP 1.0 MC TO 20.0 MC IN 20 SEC TIME 135.0E

1964 02 KOKUBUNJI 135.0E

FEBRUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	30	32	32	31	30	28	26	47	53	55	63	68	79	71	65	61	59	51	36	32	32	30	32	32
	CNT	18	21	21	25	24	22	25	26	27	26	27	25	25	25	26	27	28	27	25	26	25	25	24	21
	U Q	32	34	34	34	36	32	30	50	58	61	66	78	88	84	69	65	62	55	43	35	36	32	33	34
00	L Q	29	29	30	29	29	24	22	43	49	53	61	63	68	64	59	58	54	44	34	30	30	26	28	29
foF1	MED													U 430	435	U 440	430	U 380							
	CNT													2	8	14	7	1							
10																									
foE	MED							U 115	180	240	265	290	305	310	310	U 300	265	235	180						
20	CNT							1	12	23	21	17	13	12	13	14	20	15	3						
foEs	MED	21	23	23	22	24	21	19	G	G	29	34	34	34	31	G	G	24	24	21	22	24	20	23	23
	CNT	15	14	15	14	13	13	7	15	25	25	25	23	25	23	25	25	25	18	16	18	16	15	16	17
30																									
M	MED	290	295	310	315	335	305	315	345	345	340	330	325	335	345	345	350	355	350	335	320	320	305	295	290
3000 F2	CNT	18	21	21	25	24	22	25	26	27	26	27	25	25	25	26	27	28	27	25	26	25	25	24	21
03																									
h'F2	MED								210	240	250	270	275	255	250	250	250	240	225						
	CNT								1	5	20	25	26	25	26	25	22	17	4						
04																									
h'E																									
24																									
h'F	MED	300	280	260	250	210	260	250	220	230	230	220	220	220	210	210	210	220	210	210	245	250	260	260	290
	CNT	27	27	26	27	27	27	21	27	27	24	20	18	21	23	23	25	26	27	26	24	26	23	26	27
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



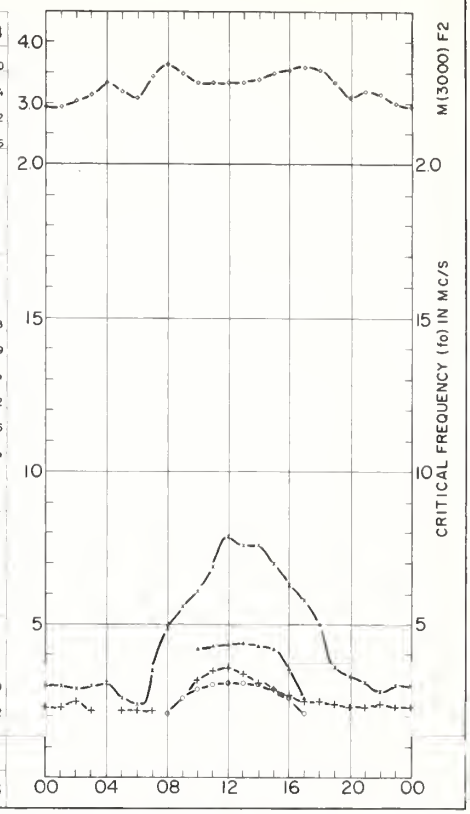
YAMAGAWA
JAPAN

LAT. 31.2N LONG. 130.6E SWEEP 0.55 MC TO 17.0 MC IN 20 SEC TIME 135.0E

1964 02 YAMAGAWA 135.0W

FEBRUARY 1964

CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	30	30	29	30	31	26	24	35	49	56	61	69	79	76	76	70	63	58	50	36	33	31	28	30
	CNT	21	22	21	23	23	23	24	23	24	24	25	25	25	26	26	26	27	27	26	25	23	24	23	24
	U Q	32	31	31	32	32	29	27	38	52	59	67	82	86	85	83	75	70	64	53	38	35	33	31	32
	L Q	26	27	28	28	57	23	22	30	46	52	57	66	68	68	65	62	58	52	43	32	29	30	26	25
foF1 10	MED											420	430	435	440	430	420	355	260						
	CNT											9	24	26	27	22	19	2	3						
foE 20	MED									210	260	290	305	310	310	305	290	260	210						
	CNT									22	24	24	26	23	24	22	23	24	18						
foEs 30	MED	23	23	25	22	E	22	22	22	G	G	32	35	36	34	31	29	27	25	25	24	23	23	24	23
	CNT	8	9	10	20	20	6	3	3	24	22	25	26	26	27	27	27	27	27	15	14	9	9	9	9
	U Q	31	29	29	25	22	23	22	24	23	30	35	39	41	37	37	32	31	33	31	25	30	28	24	24
	L Q	22	22	23	E	E	22	22	G	G	G	30	31	30	G	G	G	G	G	23	22	22	22	22	22
M 3000 F2 03	MED	300	300	310	320	340	325	315	350	370	355	340	340	340	340	345	355	360	365	360	340	315	325	320	305
	CNT	21	22	21	23	23	23	24	23	24	24	25	25	25	26	26	26	27	27	26	25	23	24	23	24
h'F2 04	MED										260	285	270	270	260	255	255	250	230						
	CNT										8	25	25	26	27	27	27	27	13						
h'E 24																									
h'F 16	MED	300	300	285	260	240	E 255	275	230	225	240	230	225	220	210	210	210	225	225	210	220	250	250	255	290
	CNT	22	23	25	24	24	17	15	25	25	24	25	23	25	27	26	26	26	26	26	24	18	24	20	22
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



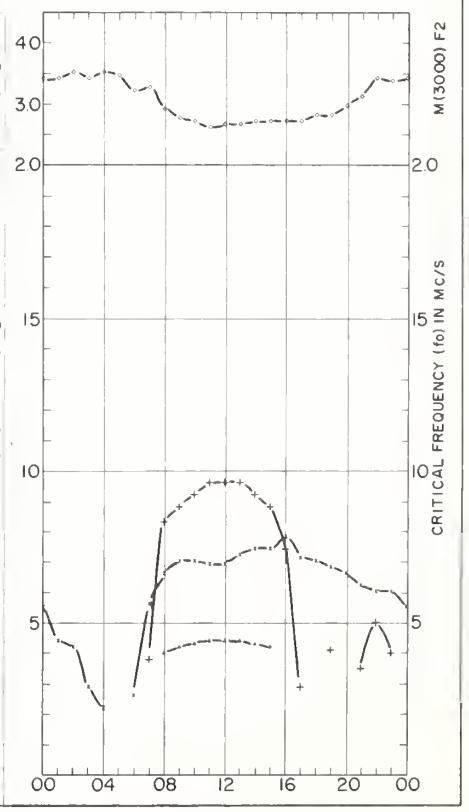
KODAIKANAL
INDIA

LAT. 10.2N LONG. 77.5E SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0E

1964 02 KODAIKANAL 75.0E

FEBRUARY 1964

CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	55	44	42	29	22	E	26	56	66	70	70	69	69	72	74	74	78	71	70	68	66	62	60	60
	CNT	18	16	19	20	23	23	28	27	28	27	26	26	28	28	27	27	27	26	28	27	19	15	14	15
foF1 10	MED									400	420	430	440	440	440	430	420								
	CNT									5	23	26	25	27	26	20	14	2							
foE 20	MED																								
	CNT								2	3	3	1		1		2	2	1							
foEs 30	MED								38	83	88	92	96	96	96	92	88	74	29		41		35	50	40
	CNT	4	2	3	1	1		1	12	19	26	25	26	27	27	26	26	19	11	4	6	3	6	5	5
M 3000 F2 03	MED	340	340	350	340	350	345	320	325	290	275	270	260	265	265	270	270	270	270	280	280	295	310	340	335
	CNT	18	16	19	19	15	11	28	27	28	27	26	26	28	28	27	27	27	26	28	27	19	15	14	15
h'F2 04	MED									320	340	360	370	365	370	360	340								
	CNT									5	21	24	23	27	24	20	14	3	1						
h'E 24	MED								120																
	CNT								6	3	3	2		1	2	2	2	2	2						
h'F 16	MED	240	230	225	235	E 255	280	280	240	220	220	200	200	200	200	200	200	210	240	260	280	270	260	260	240
	CNT	26	24	26	26	28	24	28	27	28	26	26	26	28	28	26	26	27	28	28	28	23	21	23	22
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



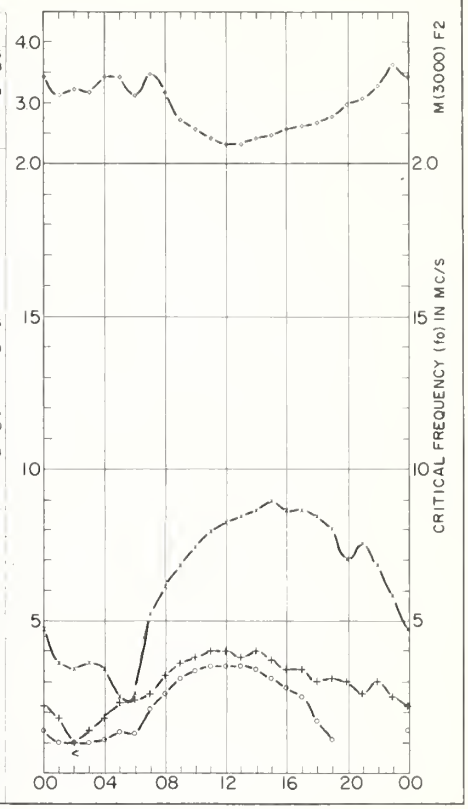
SINGAPORE
MALAYSIA

LAT. 1.3N LONG.103.8E SWEEP 0.67 MC TO 25.0 MC IN 300 SEC TIME 105.0E

1964 02 SINGAPORE 105.0E

FEBRUARY 1964

CHAR. \ HR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MEO	47	36	34	36	34	25	26	52	61	68	74	79	82	84	86	89	86	86	84	80	70	75	68	S 58
	CNT	21	20	22	16	18	18	21	23	25	24	24	27	28	26	26	25	27	23	24	23	23	17	19	19
foF1 10																									
foE 20	MEO	140	100	100	100	110	135	130	210	260	310	335	350	350	350	340	310	280	250	170	S 110				
	CNT	1	2	5	1	3	2	5	14	7	13	14	18	14	11	12	9	5	5	7	1				
foEs 30	MEO	22	18	E 10	14	18	23	24	26	32	36	38	40	40	38	40	37	34	34	30	31	30	26	30	25
	CNT	22	21	26	25	25	22	24	24	25	23	21	24	25	24	24	22	24	24	25	26	24	22	21	20
M 3000 F2 03	MEO	340	310	320	315	340	340	310	345	315	270	255	240	230	230	240	245	255	260	265	275	295	305	325	S 360
	CNT	18	18	21	16	18	17	21	22	25	24	24	27	28	26	26	25	27	19	25	23	21	16	19	18
h'F2 04																									
h'E 24																									
h'F 16																									
CHAR. \ HR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



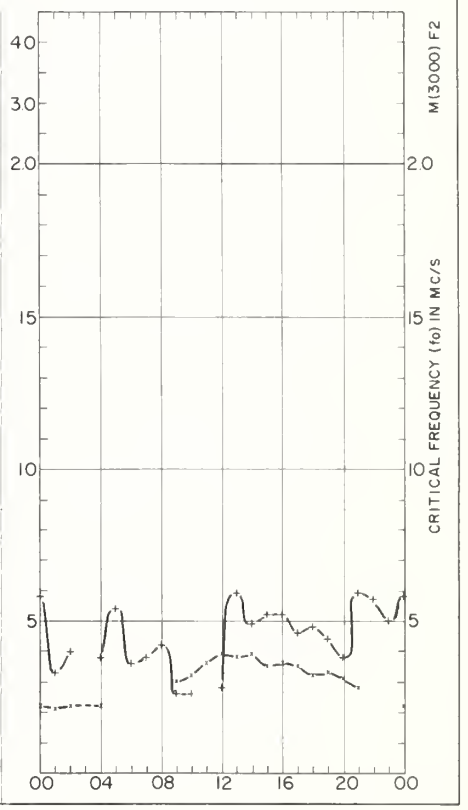
GODHAVN
GREENLAND

LAT. 69.3N LONG. 53.5W SWEEP 1.6 MC TO 20.0 MC IN 15 SEC TIME 45.0W

1964 01 GODHAVN 45.0W

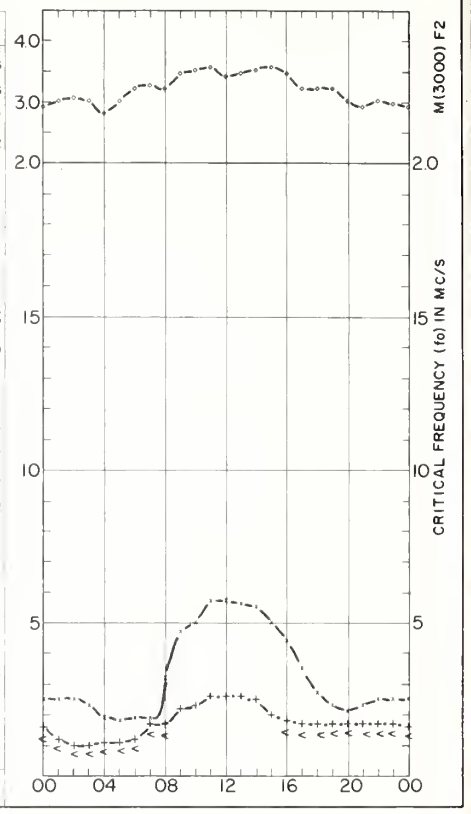
JANUARY 1964

CHAR. \ HR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MEO	U 22	U F 21	U 22		U F 22				U F 30	U F 32	F 36	F 39	U F 39	U F 38	U F 39	U F 35	U F 36	U F 35	U F 32	U F 33	U F 31	U 28		
	CNT	6	8	5	3	6	1	2	1	6	7	6	6	7	6	6	13	11	10	6	8	5	8	4	2
	U Q	U F U F 0 24	25	24		U F 24				U F U F 37	F 36	F 38	F 41	U F U F U F 43	U F 41	U F 40	U F 40	U F U F U F 36	U F 35	U F 36	F 36	32			
	L Q	U 8 U F 22	U F 20	E 21		U F 20				U F 28	U F 31	F 36	F 37	U F 35	U F 35	U F 32	U F 34	U F 30	U F 30	U F 30	U F 30	U F 28	U 23		
foF1 10																									
foE 20																									
foEs 30	MEO	M 58	M 33	M 40		M 38	M 54	M 36	M 38	M 42	26	26		28	M 59	M 49	M 52	M 52	M 46	M 48	M 44	M 38	M 59	M 57	M 50
	CNT	5	11	6	4	11	11	10	8	8	8	7	4	6	9	15	12	10	10	7	9	10	6	11	6
	U Q	M 63	M 64	M 43		M 59	M 58	M 56	M 60	M 52	M 52	M 34		41	M 72	M 66	M 60	M 68	M 66	M 60	M 61	M 41	M 66	M 72	M 63
	L Q	E 31	E	M 30		M 29	M 31	M 26	M 28	M 38	24	24		25	M 38	M 38	M 22	M 43	M 40	M 40	M 36	M 36	39	M 42	M 39
M 3000 F2 03																									
h'F2 04																									
h'E 24																									
h'F 16																									
CHAR. \ HR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



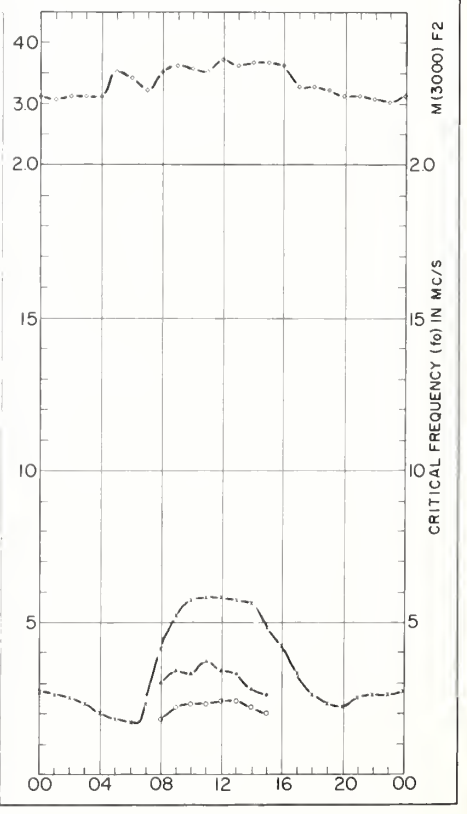
JULIUSRUH/RUGEN
GERMANY
LAT. 54.6N LONG. 13.4E SWEEP 0.5 MC TO 20.0 MC IN 25 SEC TIME 15.0E
1964 01 JULIUSRUH / RUGEN 15.0E
JANUARY 1964

CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	25	25	25	23	19	18	19	19	32	47	50	57	57	56	55	50	44	35	27	23	21	23	25	25
	CNT	21	27	25	26	25	27	27	28	31	31	28	28	31	30	29	29	29	30	29	28	27	24	22	25
	U Q	28	27	29	26	23	23	21	21	34	50	53	59	60	58	58	52	48	37	33	25	24	25	27	27
	L Q	24	22	23	19	17	17	17	17	28	43	48	54	55	55	53	47	43	32	25	21	19	20	23	22
foF1 10																									
foE 20																									
foEs 30	MED	16	12	10	10	11	11	12	17	17	22	23	26	26	26	25	20	18	17	17	17	17	17	17	17
	CNT	31	31	31	31	31	30	31	31	28	26	28	26	29	26	26	27	26	30	30	31	30	31	29	30
	U Q										25	25	31	28	30	28	24								
	L Q										20	G	G	G	G	23	G								
M 3000 F2 03	MED	290	300	305	300	280	300	320	325	320	345	350	355	340	345	350	355	345	320	320	320	300	290	300	295
	CNT	19	25	25	26	24	20	18	15	30	29	24	28	29	30	30	27	28	30	27	26	21	20	20	22
	U Q	305	310	315	310	310	310	330	335	335	360	360	365	355	350	360	370	350	335	335	330	315	305	305	305
	L Q	285	275	290	280	270	280	280	310	310	330	345	340	330	335	335	240	330	310	305	305	290	280	295	290
h'F2 04																									
h'E 24																									
h'F 16	MED	280	260	260	260	260	250	250	240	230	225	225	225	220	225	230	220	210	220	230	250	270	300	290	295
	CNT	28	30	31	30	25	21	17	9	31	31	31	30	31	30	30	30	30	30	24	20	13	17	22	24
	U Q	300	270	270	270	280	270	260	275	230	230	230	235	230	230	240	225	220	225	240	260	310	305	300	305
	L Q	270	250	250	250	250	250	230	230	220	215	215	215	220	220	225	215	210	205	220	240	265	280	270	270
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



DEBILT
NETHERLANDS
LAT. 52.1N LONG. 5.2E SWEEP 1.8 MC TO 18.0 MC IN 300 SEC TIME 0.0
1964 01 DEBILT 0.0
JANUARY 1964

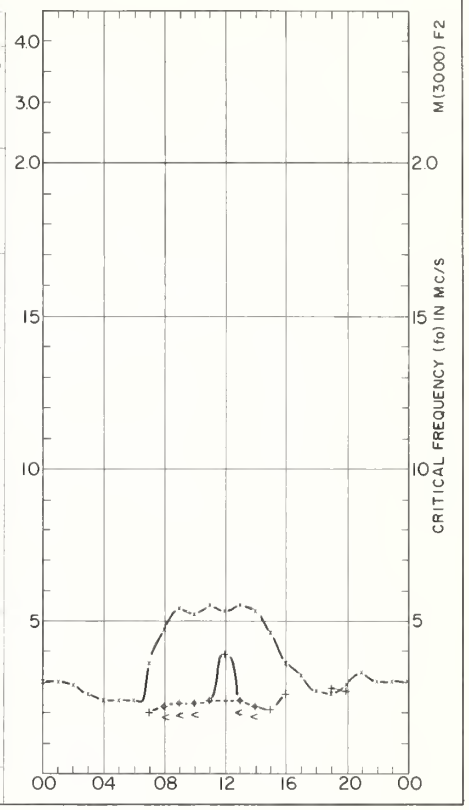
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	27	26	25	23	20	18	17	23	41	52	57	58	58	57	56	48	42	33	26	23	22	25	26	26
	CNT	30	28	28	27	27	26	26	24	30	29	30	30	30	30	31	31	31	30	30	29	29	29	28	28
	U Q	30	32	29	26	23	22	20	25	45	54	59	61	63	62	58	52	45	35	30	26	26	29	31	30
	L Q	25	23	23	19				22	39	50	52	53	54	53	51	46	38	29	23	21	20	23	23	23
foF1 10	MED									U 300	U 340	330	370	340	330	U 280	U 260								
	CNT									1	2	9	14	15	18	4	3								
foE 20	MED									180	220	230	230	240	240	220	200	E							
	CNT									24	22	24	29	25	28	27	16								
foEs 30																									
M 3000 F2 03	MED	310	305	310	310	310	350	340	320	350	360	355	350	370	360	365	365	360	325	325	320	310	310	305	300
	CNT	26	26	25	19	12	9	6	16	30	29	30	30	30	30	31	31	31	30	28	22	16	23	26	25
h'F2 04	MED									U 235	225	230	225	225	230	225	220	U 225							
	CNT									5	13	24	27	29	28	24	12	1							
h'E 24	MED									E	148	124	120	120	124	124		E	E						
	CNT									24	20	17	23	20	21	26	24	16							
h'F 16	MED	270	265	275	E E 300	E E E E 305	360		E 295	215	215	220	220	220	215	225	210	210	225	240	E E 295	E E 300	295	280	275
	CNT	30	29	28	28	28	27	26	23	30	29	30	30	27	29	30	31	31	29	30	29	28	29	29	30
CHAR.	HR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



PRUHONICE
CZECHOSLOVAKIA LAT. 50.0N LONG. 14.6E SWEEP 1.0 MC TO 18.0 MC IN SEC TIME 0.0 1964 01 PRUHONICE 0.0

JANUARY 1964

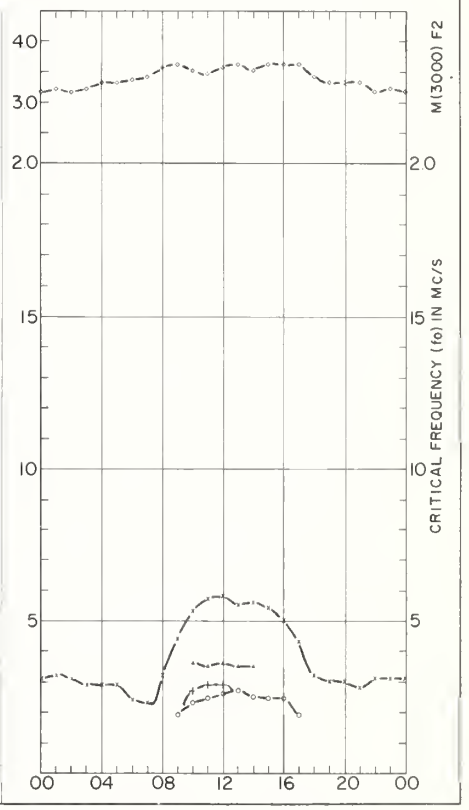
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	30	30	29	26	24	24	24	36	47	54	52	55	53	55	53	46	36	32	27	26	29	33	30	30
	CNT	23	26	26	25	21	19	14	23	27	27	24	27	25	27	29	30	30	16	13	10	10	12	17	21
foF1 10	MED																								
	CNT																								
foE 20	MED									220	230	230	240		240	220									
	CNT								3	8	12	15	13	3	11	13	2								
foEs 30	MED	E	E	E	E	E			20	E G 22	E G 23	E G 23	E G 24	39	E G 24	E G 22	E G 21	26			28	27			
	CNT	8	19	23	16	4	2		7	13	21	17	18	5	16	17	14	4	1	2	7	4	3	2	2
M 3000 F2 03	MED																								
	CNT																								
h'F2 04	MED																								
	CNT																								
h'E 24	MED									130	110	105	110		110	110									
	CNT								3	9	13	16	13	3	11	13	2								
h'F 16	MED	255	250	250	250	245	235	230	210	215	220	225	220	240	235	225	210	200	225	245	250	250	270	260	260
	CNT	22	24	25	18	12	10	7	20	24	25	19	19	17	24	27	30	21	10	8	7	6	7	10	14
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



SOTTENS
SWITZERLAND LAT. 46.6N LONG. 6.7E SWEEP 1.0 MC TO 25.0 MC IN 30 SEC TIME 15.0E 1964 01 SOTTENS 15 0E

JANUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	31	32	31	29	29	29	24	23	32	44	53	57	58	55	56	54	50	43	32	30	30	28	31	31
	CNT	19	20	22	20	21	20	19	15	19	22	21	20	20	19	22	21	20	24	23	19	17	14	18	18
foF1 10	MED											360	350	360	350	350									
	CNT											2	1	5	4	2									
foE 20	MED										190	230	245	260	270	250	245	245	190						
	CNT										9	10	14	12	11	9	6	5	1						
foEs 30	MED	E	E	E	E	E	E	E	E	E G		27	29	29		G	G	G	E	E	E	E	E	E	E
	CNT	23	23	23	23	23	23	23	23	23	23	22	23	21	22	23	23	20	24	23	22	20	21	22	22
M 3000 F2 03	MED	315	320	315	320	330	330	335	340	355	360	350	345	355	360	350	360	360	360	340	330	330	330	315	320
	CNT	17	19	21	18	17	16	14	8	17	13	17	14	14	14	14	14	13	21	21	16	15	9	12	12
h'F2 04	MED											330	225	250	230	250									
	CNT											4	1	5	4	2									
h'E 24	MED										125	115	110	110	110	120	110	115	160						
	CNT										9	10	14	11	11	9	5	6	1						
h'F 16	MED	260	250	250	260	250	250	240	220	210	210	225	220	200	215	225	220	215	200	220	250	250	250	270	270
	CNT	22	22	23	23	23	23	21	13	20	23	21	21	22	20	21	23	21	24	23	19	17	13	15	16
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



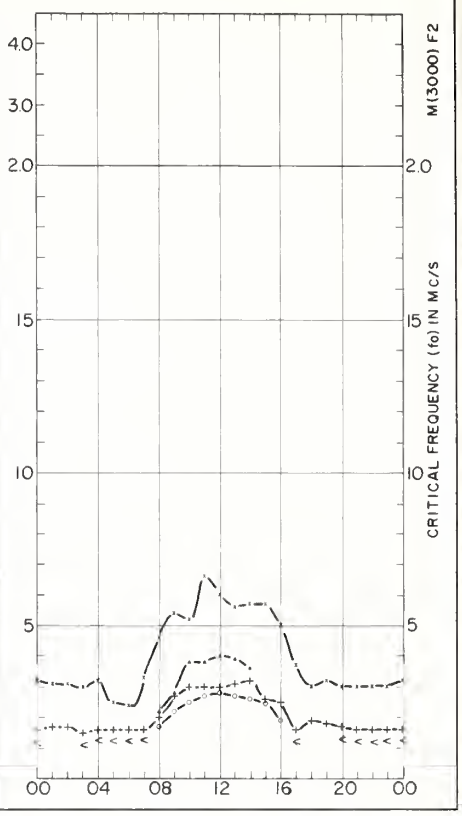
TORTOSA
SPAIN

LAT. 40.8N LONG. 0.5E SWEEP . MC TO . MC IN SEC TIME 0.0

1964 01 TORTOSA 0.0

JANUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	32	31	31	30	32	25	24	33	46	54	52	66	60	56	57	57	50	37	30	32	30	30	30	30
	CNT	9	11	11	9	10	9	10	9	9	10	11	10	13	12	12	10	9	7	8	7	11	11	10	8
foF1 10	MED									220	280	380	380	400	390	360									
	CNT									6	6	5	12	9	9	7									
foE 20	MED									170	220	250	270	280	270	260	245	190							
	CNT									7	11	7	12	12	12	11	11	6							
foEs 30	MED	E 16	17	17	E 15	E 16	16	E 16	E 16	20	27	30	30	30	31	32	26	25	E 16	19	18	E 17	E 16	E 16	E 16
	CNT	11	12	11	9	10	9	10	9	10	10	10	9	7	8	6	8	8	9	10	11	12	12	11	11
M 3000 F2 03																									
h'F2 04	MED									205	230	225	240	250	245	230									
	CNT									7	8	9	12	11	9	7									
h'E 24	MED									125	110	105	105	105	100	107	U 103	U 108							
	CNT									7	11	7	12	12	12	11	11	6							
h'F 16	MED	U 250	250	U 250	245	230	230	U 220	220	205	200	215	200	220	U 205	205	220	205	200	230	245	U 230	U 240	U 260	260
	CNT	11	11	11	9	10	10	10	10	8	9	8	9	11	13	10	10	9	8	10	10	12	11	11	10
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



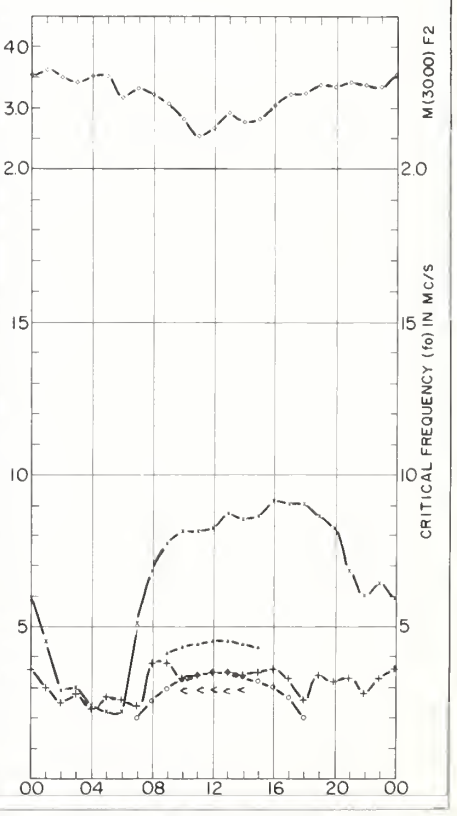
TALARA
PERU

LAT. 4.6S LONG. 81.3W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W

1964 01 TALARA 75.0W

JANUARY 1964

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	59	45	29	30	24	22	22	51	68	77	H 81	H 81	H 82	87	85	86	91	90	90	86	82	68	60	64
	CNT	9	8	9	11	12	9	17	31	31	31	31	31	31	31	31	31	30	30	30	31	29	21	15	10
	U Q	70	50	34	32	28	26	26	54	75	83	H 88	H 88	H 89	92	89	92	100	100	96	96	90	79	70	U 67
	L Q	40	42	26	22	O 19	O 17	20	48	63	71	H 74	H 75	H 77	80	80	83	89	87	84	74	63	58	57	60
foF1 10	MED										410	430	440	450	450	440	430								
	CNT										7	16	23	25	27	26	13	1							
	U Q										430	440	440	450	450	440	430								
	L Q										410	430	440	440	440	440	425								
foE 20	MED								U 200	U 255	295	U 325	340	350	350	335	U 320	U R 300	U R 265	U 200					
	CNT								15	14	19	24	22	24	23	23	22	17	13	7					
foEs 30	MED	M 36	M 30	M 25	M 28	M 23	M 27	M 26	M 24	M 38	M 38	E 33	E 34	E 35	E 35	E 34	E 35	36	33	26	M 34	M 32	M 33	M 28	M 33
	CNT	14	17	16	15	21	20	20	30	31	31	31	30	30	31	31	31	28	29	30	20	18	11	18	15
	U Q	M 47	M 41	M 39	M 36	M 35	M 44	M 38	M 37	M 45	M 46	M 45	M 43	M 42	39	38	M 40	37	M 42	M 36	M 44	M 44	M 58	M 36	X 41
	L Q	M 25	M 20	M 22	M 20	M 22	M 21	E 22	E 21	29	E 29	E 32	E 33	E 35	E 34	E 33	E 32	31	28	23	23	M 23	M 24	M 22	M 24
M 3000 F2 03	MED	352	360	348	340	350	350	315	330	320	305	H 280	H 252	H 265	290	275	280	302	320	322	335	332	340	335	332
	CNT	8	6	8	8	9	5	16	31	31	31	31	30	30	31	31	30	28	30	30	26	26	20	13	8
	U Q	365	365	360	350	370	385	328	350	340	325	H 310	H 275	H 285	H 310	300	290	310	330	340	345	345	355	352	340
	L Q	320	340	332	322	335	330	310	325	300	280	H 245	H 240	H 235	H 260	255	270	292	300	310	320	310	330	325	310
h'F2 04																									
h'E* 24	MED								E 128	112	111	111	110	111	111	111	110	114	116	E 129					
	CNT								18	25	29	29	30	29	31	29	29	23	24	15					
h'F 16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



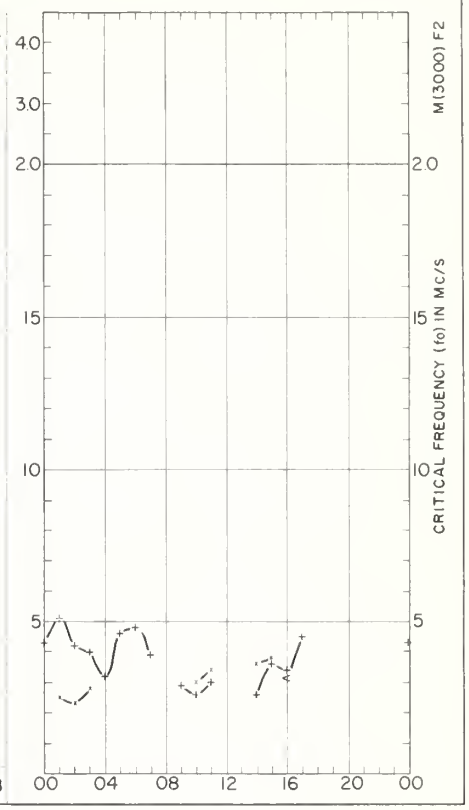
*Values of h'E are often incorrect owing to the fact that the trace has not always become horizontal.

GODHAVN
GREENLAND

LAT. 69.3N LONG. 53.5W SWEEP 1.6 MC TO 20.0 MC IN 15 SEC TIME 45.0W 1963 12 GODHAVN 45.0W

DECEMBER 1963

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MED		U F 25	U F 23	U F 28							U F 30	U 34			U F 36	U F 38								
		CNT	4	5 F	5 U	10 U F	3	3	3	1	1	4	7 U F	6 U F	1	1	11 U F	18 U F	3	4					1	
		U Q		29	34	30							30	39			40	40								
00		L Q		22	F U 22	F U 25							U F 28	U F 29			U F 34	U F 32								
foF1																										
10																										
foE																										
20																										
foEs		MED	M 43	M 51	M 42	M 40	32	M 46	M 48	M 39		29	26	30			M 26	36	E 34	M 45						
		CNT	12 M	12 M	9 M	7 M	6 M	5 M	15 M	14 M	2	10 M	7	8 M	1	16 M	17 M	10 M	6 M						
		U Q	59 E	71	50 E	58 E	40 E	73	62	49 M		54	36	39 E		51 E	51 E	40	72 M						
30		L Q		32				33	26	32		24	24						42							
M 3000 F2																										
03																										
h'F2																										
04																										
h'E																										
24																										
h'F																										
16																										
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

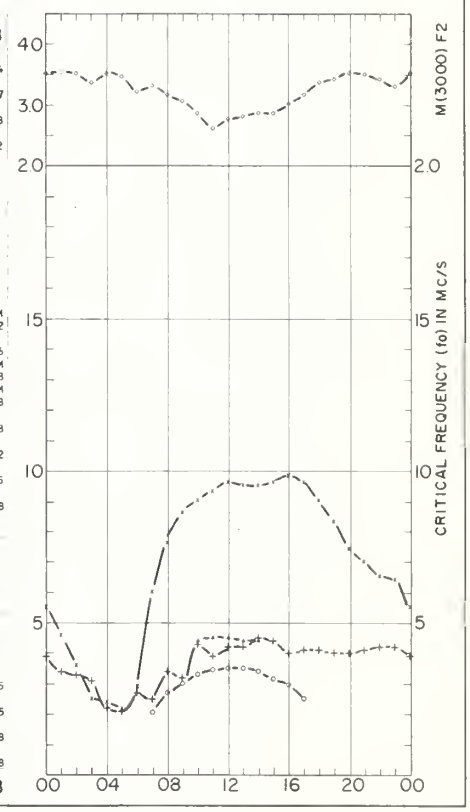


TALARA
PERU

LAT. 4.6S LONG. 81.3W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W 1963 12 TALARA 75.0W

DECEMBER 1963

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MED	55	46	36	25	24	22	29	60	76	86	90	H 93	96	95	95	96	98	96	90	83	74	70	65	64
		CNT	11	14	13	13	12	12	19	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	27	17
		U Q	66	56	40	38	32	26	33	62	81	90	H 95	H 95	102	105	100	101	102	100	100	93	84	78	73	68
00		L Q	49	40	28	22	19	18	27	56	72	78	82	89	85	88	89	H 92	94	89	81	69	64	65	57	52
foF1		MED											440	450	450	440	440									
		CNT									1	16	23	26	18	11	3									
		U Q											440	450	450	450	440									
10		L Q											435	440	450	440	430									
foE		MED								205	270	U 300	330	345	350	350	340	315	295	U 250						
20		CNT								18	17	20	23	19	21	18	17	12	15	11	2					
foEs		MED	M 39	M 34	M 33	M 31	M 22	M 21	M 27	M 25	M 34	M 32	M 43	M 39	M 42	M 42	M 45	M 44	M 40	M 41	M 41	M 40	M 40	M 41	M 42	M 42
		CNT	27 M	25 M	21 M	17 M	16 M	17 M	13 M	31 M	31 M	31 M	30 M	31 M	31 M	31 M	31 M	31 M	31 M	31 M	30 M	28 M	28 M	27 M	22 M	26 M
		U Q	48 M	52 M	50 M	40	36	31	34	37	45	46	52	56 E	51 E	55 E	67	58	52	56	57 M	54 M	72 M	56 M	53 M	48 M
30		L Q	24	22	23	20	20	17	17	22	28	30	33	35 H	35	35	34	33	32	33	33	30	27	27	32	28
M 3000 F2		MED	350	352	350	335	350	345	320	330	315	305	285	260	275	280	285	285	300	315	335	340	350	348	340	328
		CNT	10	10	11	11	8	8	18	29	31	31	30	31	27	30	28	31	30	28	31	31	28	30	23	12
		U Q	355	365	365	350	365	368	330	335	330	330	305	285	300	300	300	300	315	330	340	350	355	360	345	345
03		L Q	330	345	325	320	348	328	310	320	305	H 285	H 265	H 25	250	265	270	H 275	280	305	315	335	342	340	325	318
h'F2		MED									290	302	325	360	355	330	335	340	310	E 285						
		CNT								1	16	22	27	31	31	31	26	28	18	17	1					
		U Q									298	325	340	375	370	355	380	358	335	E 292						
04		L Q									265	290	310	330	335	320	315	312	290	268						
h'E*		MED								119	113	111	109	109	109	109	109	109	111	113	E S 131					
24		CNT								28	27	28	29	27	27	29	30	28	26	23	5					
h'F		MED	230	E 220	232	250	242	E 250	E 268	240	220	205	200	192	E 188	195	195	190	E A 225	E A 245	E A 250	230	230	E 225	225	235
		CNT	18	21	16	15	16	15	26	30	30	30	31	30	30	29	27	30	28	25	25	31	31	31	30	25
		U Q	E 255	238	E 248	E 270	E 262	E S E 265	280	240	230	215	210	200	200	200	E 210	205	E A 250	E A 250	E 255	E 240	E 235	E 235	E 240	E 248
16		L Q	220	210	E 222	235	E 235	235	255	230	210	195	195	185	180	185	190	180	192	235	240	225	220	210	E 215	E 228
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



*Values of h'E are often incorrect owing to the fact that the trace has not always become horizontal.

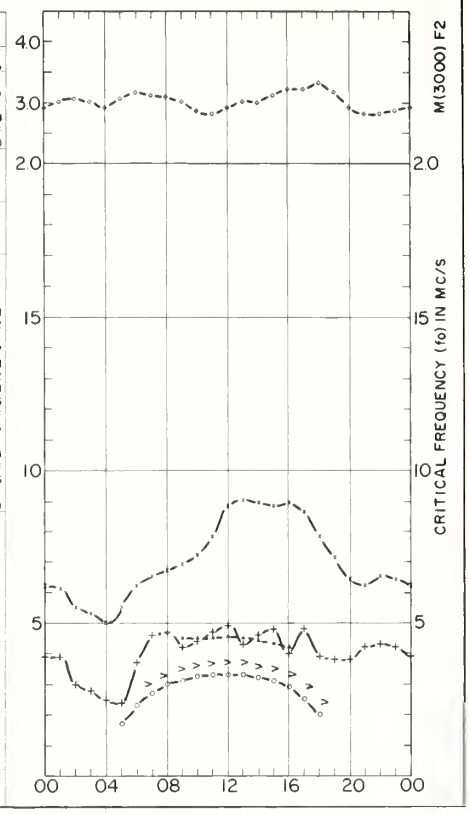
CONCEPCION
CHILE

LAT. 36.6S LONG. 73.0W SWEEP 0.25 MC TO 20.0 MC IN 130.5 SEC TIME 75.0W

1963 12 CONCEPCION 75.0W

DECEMBER 1963

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MEO	F 62	F 61	F 55	F 53	U F 50	F 55	62	65	67	69	72	78	88	90	89	88	89	86	78	71	64	62	65	F 64
		CNT	24	23	25	27	21	27	28	29	28	28	28	29	31	28	30	25	27	28	26	27	30	29	25	24
				F	F	U F	F	F																		
		U 0	65	64	60	58	55	60	70	76	75	78	84	88	94	100	102	100	96	94	90	76	72	70	72	68
00		L 0	F 55	F 52	F 50	F 45	U F 41	F 48	F 60	F 58	54	54	62	71	78	79	81	80	81	70	66	61	58	58	59	F 60
foF1		MEO										450	450	450	455	450	440	430	U L 420							
		CNT								1	4	12	18	16	20	22	14	14	5							
												U L						U L	U L							
		U 0										450	460	460	460	460	450	440	420							
10		L 0										440	440	450	450	440	440	430	410							
foE		MEO								0	0	O R	O	O R	O R	O R	O R	O R	O	O	A	O A				
								170	230	270	300	310	325	330	330	330	320	310	290	250	200					
20		CNT						9	23	26	25	26	28	27	26	21	27	27	28	26	16					
foEs		MEO	M 39	M 39	M 30	M 28	M 25	24	37	M 46	M 47	42	44	47	49	43	46	48	40	M 48	M 39	M 38	M 38	M 42	M 43	M 42
		CNT	29	28	28	27	28	28	28	28	28	28	28	30	31	29	30	28	29	30	29	28	27	25	25	27
			M	M	M	M	M	M	M	M	M	M	M	M	M		M	M	M	M	M	M	M	M	M	M
		U 0	50	48	40	37	36	35	44	58	58	59	64	58	53	50	55	66	62	72	67	54	64	58	57	52
30		L Q	M 31	M 29	M 24	M 24	M 18	21	30	36	38	37	37	39	41	37	39	35	33	33	25	22	M 25	M 29	M 37	M 35
M		MEO	F 290	F 300	F 305	F 300	U F 290	F 305	315	310	308	300	285	280	290	300	298	310	320	320	330	315	290	280	280	F 285
3000		CNT	23	23	25	27	21	27	28	29	28	28	28	29	31	28	30	24	27	28	25	25	30	29	25	23
F2			F	F	F	U F	U F	F																		U F
		U 0	300	320	318	310	298	320	332	330	318	315	300	290	300	308	310	318	330	332	342	330	295	288	290	295
03		L Q	F 280	U F 280	F 288	F 290	F 288	F 275	298	298	290	288	272	268	275	290	290	298	305	308	312	295	280	270	280	280
h'F2																										
04																										
h'E		MEO						130	118	111	110	110	110	110	111	E 112	110	112	111	115	122					
24		CNT						13	28	28	28	28	28	27	27	25	28	28	29	30	20					
h'F																										
16																										
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



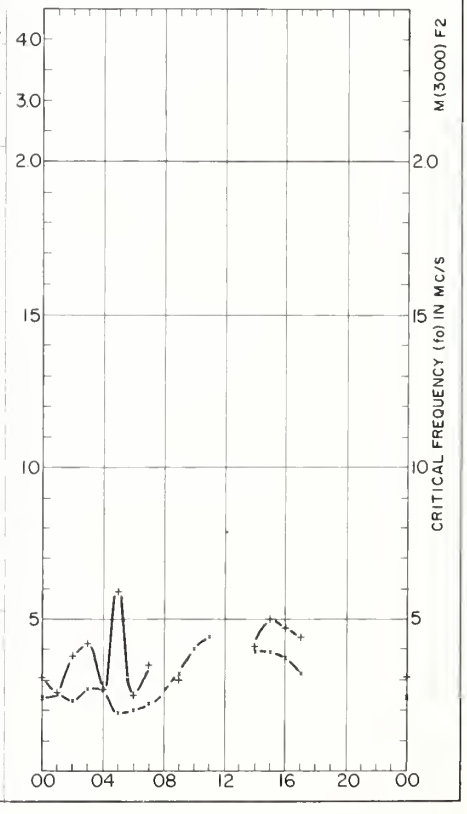
GODHAVN
GREENLAND

LAT. 69.3N LONG. 53.5W SWEEP 1.6 MC TO 20.0 MC IN 15 SEC TIME 45.0W

1963 11 GODHAVN 45 OW

NOVEMBER 1963

CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2		MEO	U F 24	U F 25	U F 23	U F 27	F 27	19	20	22		U F 32	U F 40	U F 44			U 39	U F 39	U F 37	32						
		CNT	9	10	9	12	9	7	5	5	2	17	17	9	4	4	17	26	17	8	1	1	3	2	2	1
			U F	U F	U F	U F	U F			U F			U F	U			U F	U F	U F	U F						
		U 0	29	27	28	30	35	25	24	40		40	45	52			47	47	41	36						
00		L Q				U F	E	E	E	E		U F	U F	U F						E						
			20	20	21	24				18		27	34	40			32	35	26	24						
foF1																										
10																										
foE																										
20																										
		MEO	M 31	M 26	M 38	M 42	M 27	M 59	M 25	M 35		30					41	M 50	M 47	M 44						
foEs		CNT	9	15	14	10	15	16	13	12	1	12	4	4	1		8	11	14	6						
			M	M	M	M	M	M	M	M		M						M	M	M						
		U 0	46	46	50	58	42	60	47	59		31					54	70	70	54						
30		L 0	E	E	E	E	E		E									M	E	M						
								29	21	30		27					28	44		30						
M																										
3000																										
F2																										
03																										
h'F2																										
04																										
h'E																										
24																										
h'F																										
16																										
CHAR.		HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

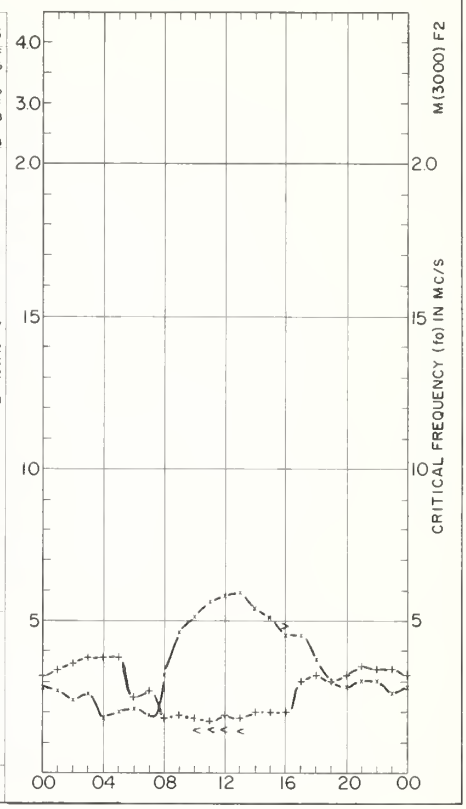


NARSSARSSUAO
GREENLAND

LAT. 61.2N LONG. 45.4W SWEEP 1.0 MC TO 25.0 MC IN 16.2 SEC TIME 45.0W 1963 11 NARSSARSSUAQ 45.0W

NOVEMBER 1963

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	28	27	24	26	18	20	21	19	32	46	51	56	58	59	53	51	45	45	37	30	28	30	30	26
	CNT	7	5	8	6	7	10	9	12	18	20	24	27	28	27	25	23	19	12	10	11	12	6	5	6
	U Q	31	28	28	26	30	27	24	23	35	49	56	59	60	62	59	57	56	47	41	32	32	34	31	33
00	L Q	22	22	20	17	16	18	17	16	29	41	50	52	50	51	50	46	34	34	33	23	22	27	28	23
foF1																									
10																									
foE																									
20																									
foEs	MED	32	34	36	38	38	38	25	27	18	19	18	17	19	18	20	20	20	30	32	30	32	35	34	34
	CNT	23	21	20	22	21	18	15	15	15	13	18	17	19	22	23	25	25	23	28	26	27	27	23	22
	U Q	43	42	44	47	44	42	37	37	21	26	22	22	25	30	30	32	30	32	41	35	65	45	47	42
30	L Q	25	24	25	26	25	24	16	15	12	16	15	16	16	15	17	17	12	12	22	24	27	27	27	28
M 3000 F2																									
03																									
h'F2																									
04																									
h'E																									
24																									
h'F																									
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

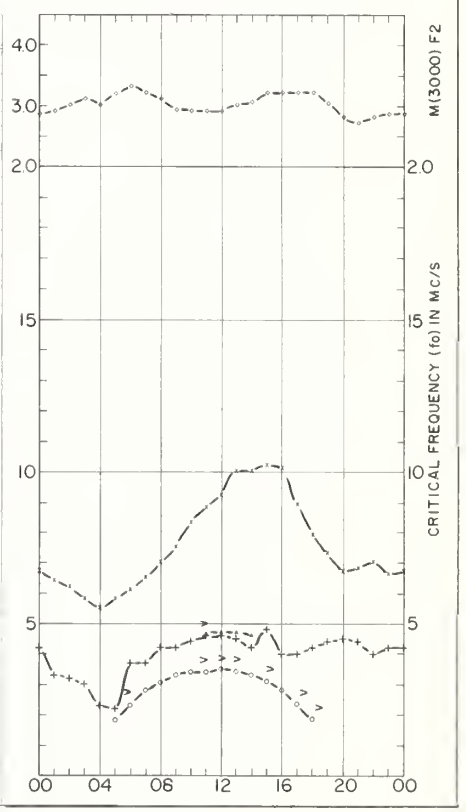


CONCEPCION
CHILE

LAT. 36.6S LONG. 73.0W SWEEP 0.25 MC TO 20.0 MC IN 130.5 SEC TIME 75.0W 1963 11 CONCEPCION 75.0W

NOVEMBER 1963

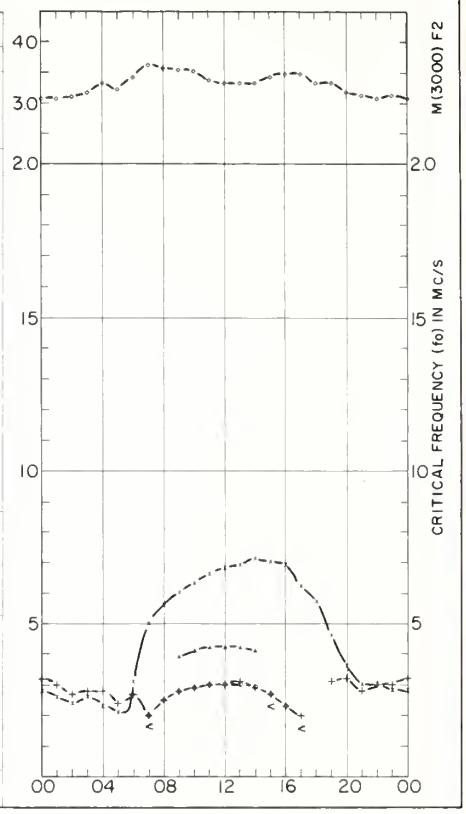
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	67	64	62	58	55	58	61	65	70	75	83	88	92	100	100	102	101	89	79	73	67	68	70	66
	CNT	21	21	24	25	26	28	29	28	28	29	30	30	29	30	29	30	30	29	29	29	28	25	26	25
	U Q	71	70	67	64	59	66	70	70	78	83	87	98	102	107	109	112	114	100	94	84	78	72	73	70
00	L Q	62	61	58	54	45	52	56	60	66	69	78	79	84	90	92	90	87	76	71	62	62	61	66	61
foF1	MED												465	470	470	460									
	CNT										2	4	10	7	9	8	1								
	U Q												470	470	475	470									
10	L Q												460	460	455	455									
foE	MED						182	230	280	305	330	340	340	350	342	330	310	280	235	185					
20	CNT						14	24	26	29	28	27	28	26	26	30	30	26	22	6					
foEs	MED	42	33	32	30	23	22	37	37	42	42	44	46	46	45	42	48	40	40	42	44	45	44	40	42
	CNT	27	29	28	26	26	29	29	29	30	30	30	30	30	30	30	30	30	30	30	28	28	28	28	27
	U Q	53	41	40	42	37	26	44	52	58	57	56	54	53	53	57	57	58	51	72	64	50	55	54	51
30	L Q	31	24	21	22	20	20	29	32	37	39	40	38	42	39	37	35	34	30	23	29	30	38	32	36
M 3000 F2	MED	285	290	300	310	300	318	330	320	310	292	290	290	290	300	305	320	320	320	320	302	280	270	280	285
	CNT	21	21	24	25	26	28	29	28	27	28	29	30	29	30	29	29	30	29	27	28	26	24	25	23
	U Q	295	300	308	320	305	330	340	330	330	310	302	305	310	310	318	328	330	332	330	312	290	280	290	290
03	L Q	278	280	290	295	290	300	308	302	300	280	280	280	280	290	300	310	315	315	310	290	275	270	272	280
h'F2																									
04																									
h'E	MED						139	120	117	112	111	113	118	118	119	116	118	118	120						
24	CNT						17	29	29	30	30	29	29	30	28	30	30	27	24	4					
h'F																									
16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



FT. MONMOUTH
NEW JERSEY, U.S.A. LAT. 40.4N LONG. 74.1W SWEEP 1.0 MC TO 25.0 MC 1N 27 SEC TIME 75.0W 1963 10 FT. MONMOUTH 75.0W

OCTOBER 1963

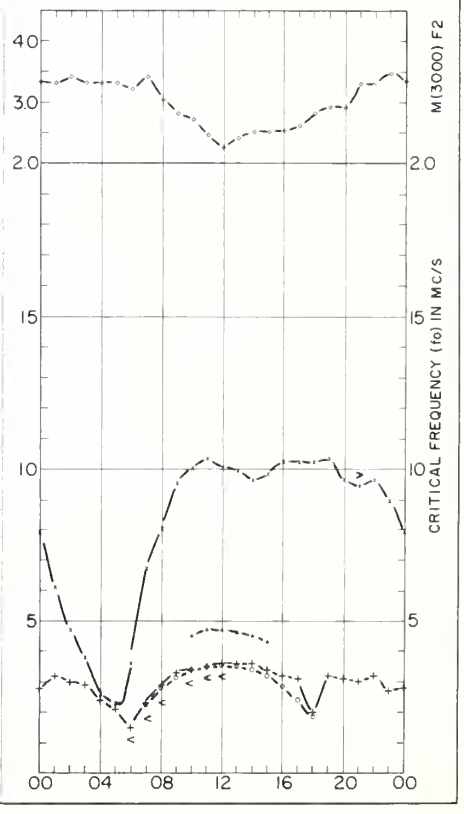
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	28	26	U 24	26	U 23	U 21	31	50	56	60	63	66	68	69	71	70	69	62	57	46	36	30	30	28
	CNT	24	21	21	14	21	19	27	30	30	30	30	30	30	29	30	31	31	30	29	26	27	27	27	25
	U Q	31	30	30	29	27	24	33	53	60	64	68	73	76	80	77	77	76	68	60	50	42	36	32	32
00	L Q	25	22	U 22	23	U 20	U 19	U 27	45	51	56	59	62	61	62	64	64	62	56	48	40	33	30	26	U 24
foF1	MEO										390	410	420	420	420	410									
	CNT								1	3	5	11	18	15	11	6	1	1							
	U Q										400	U 420	U L 430	U 430	U L 420	410									
10	L Q										H 365	410	410	410	420	400									
foE	MEO								200	250	278	290	300	300	300	292	270	230							
20	CNT								20	19	16	19	13	15	20	24	23	21	2						
foEs	MEO	M 32	M 30	M 27	M 28	28	24	27	E 20	25	28	29	30	30	31	29	E 27	23	E 20		M 31	M 32	M 28	M 30	M 30
	CNT	7	6	11	6	10	5	8	26	28	29	29	30	29	29	31	31	30	22	4	9	12	12	12	11
	U Q	M 37	M 31	M 31	M 31	M 41	M 34	M 42	E 22	E 26	E 30	E 30	E 31	E 32	E 32	E 30	E 28	E 25	E 21		M 36	M 38	M 32	M 33	M 35
30	L Q	M 24	M 21	23	24	24	U 22	18	E 20	E 25	O 26	E 28	E 29	E 28	E 30	25	E 23	E 21	E 17		20	M 30	20	23	M 24
M	MEO	305	305	308	315	U 330	320	340	360	355	352	350	335	330	330	330	340	345	345	330	330	315	310	305	310
3000	CNT	22	17	16	12	15	15	24	30	30	30	28	29	30	28	30	30	29	29	28	25	26	26	24	21
F2	U Q	315	320	320	322	U 335	335	348	370	365	365	358	348	345	340	340	345	350	355	340	338	330	315	310	310
03	L Q	300	302	295	310	320	U 310	325	345	350	340	340	320	320	315	325	330	335	335	320	318	310	300	298	298
h'F2	MEO									240	247	260	268	270	277	268	255	250							
	CNT								3	16	28	27	27	27	26	28	28	12							
	U Q									250	258	278	297	290	288	280	270	256							
04	L Q									232	240	240	251	255	259	261	240	243							
h'E	MEO								E 118	110	108	105	106	107	108	109	110	115	E 120						
24	CNT								24	27	28	29	26	25	24	28	29	24	5						
h'F	MEO	E S 286	E S 280	E S 281	E S 273	E S 255	E S 290	242	222	219	210	200	192	190	200	208	221	230	221	220	230	245	266	S 280	S 280
	CNT	29	28	27	25	25	21	29	30	30	29	30	30	29	29	30	30	30	30	31	31	31	31	30	30
	U Q	E S 300	E S 295	E S 300	E S 296	E S 278	E S 300	254	231	222	215	207	200	200	210	220	230	230	230	230	240	260	S 279	S 290	E S 295
16	L Q	270	S E 270	E 260	250	244	E S 258	230	212	209	200	197	188	180	H 187	H 200	210	220	215	210	220	231	252	270	S 272
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



TALARA
PERU LAT. 4.6S LONG. 81.3W SWEEP 1.0 MC TO 25.0 MC 1N 27 SEC TIME 75.0W 1963 10 TALARA 75.0W

OCTOBER 1963

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	79	61	47	38	26	23	36	67	80	95	100	103	100	99	96	98	102	102	U S 102	103	96	O 94	96	89
	CNT	24	23	26	23	22	21	27	28	30	31	31	31	30	30	30	30	30	30	31	31	25	20	21	21
	U Q	86	76	54	45	38	36	43	70	86	98	104	110	107	106	106	105	105	108	109	110	110	102	104	O 99
00	L Q	66	52	43	32	24	20	33	62	75	82	90	90	94	94	90	93	95	92	U S 93	U S 92	88	O 90	88	82
foF1	MEO											450	470	470	460	450	U L 430								
	CNT										1	11	22	21	16	9	5								
	U Q											U L 470	U L 480	480	470	U L 455	U L 440								
10	L Q											440	460	455	450	445	410								
foE	MEO								225	280	315	340	350	355	350	340	320	285	240	185					
20	CNT							1	27	29	30	30	30	28	27	24	22	23	19	5					
foEs	MEO	M 28	M 32	M 30	M 29	M 24	M E 21	E 15	E 23	E 29	E 33	E 34	E 35	E 36	36	36	34	32	M 31	20	M 32	M 31	M 30	M 32	M 27
	CNT	16	17	22	18	18	17	24	28	30	29	30	31	28	30	M 30	M 30	29	30	31	16	7	9	11	13
	U Q	M 38	M 42	M 36	M 34	M 30	M 28	M 22	E 24	E 33	E 36	E 36	E 38	E 40	E 41	E 41	E 43	E 42	E 46	M 46	M 46	M 40	M 44	M 42	M 34
30	L Q	M 24	M 24	M 21	M 21	M 21	E 16	E 15	E 22	E 28	E 32	E 34	E 35	E 34	E 35	E 34	E 32	E 28	E 24	U S 18	M 22	M 21	M 26	M 22	M 22
M	MEO	332	330	340	330	330	330	320	340	302	280	270	245	225	240	250	250	252	260	280	290	290	328	330	345
3000	CNT	24	22	26	22	18	19	27	28	30	31	31	30	28	27	30	29	28	29	U S 31	30	22	14	19	17
F2	U Q	342	350	350	340	340	340	325	342	320	305	290	255	242	255	265	260	270	278	U S 290	300	310	340	340	350
03	L Q	320	320	330	320	310	310	310	325	280	270	250	230	220	230	235	240	242	250	U S 265	280	U 280	315	315	328
h'F2	MEO											342	348	338	355	340	310								
	CNT										2	10	22	22	17	10	5								
	U Q											360	370	380	365	355	318								
04	L Q											310	330	325	325	315	275								
h'E	MEO								119	111	109	109	109	109	108	109	109	109	111						
24	CNT								28	30	29	30	31	30	30	29	29	E 28	E 24	1					
h'F	MEO	202	215	220	230	240	255	260	238	218	210	200	200	200	195	195	192	E 200	E 228	250	265	260	230	212	210
	CNT	30	30	29	25	23	E 20	29	28	30	30	29	30	29	27	24	24	22	24	30	31	28	29	30	29
	U Q	220	230	230	240	250	290	270	240	225	220	212	210	205	200	200	200	200	240	250	270	288	240	230	220
16	L Q	200	205	220	218	225	240	252	230	210	200	200	195	192	190	182	182	180	202	250	255	252	220	210	200
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

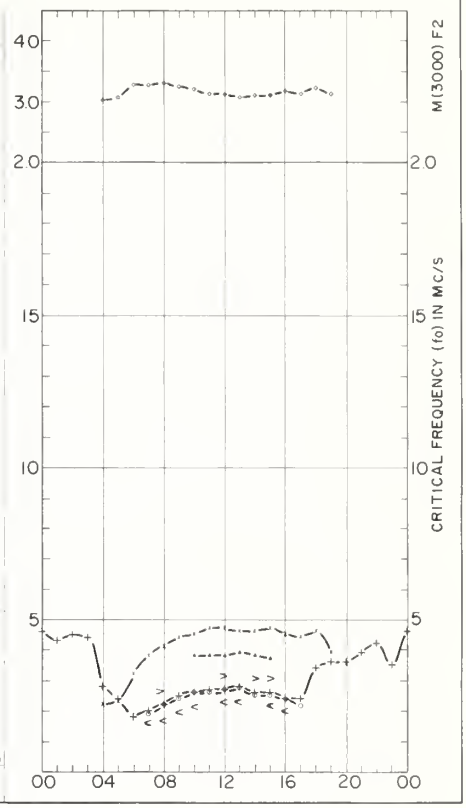


REYKJAVIK
ICELAND

LAT. 64.1N LONG. 21.8W SWEEP 1.0 MC TO 25.0 MC IN 16.2 SEC TIME 15.0W 1963 09 REYKJAVIK 15.0W

SEPTEMBER 1963

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED					U 22	U 23	32	38	41	44	45	47	47	46	46	47	45	44	46	U 39				
	CNT		2	3	4	10	9	11	16	18	16	14	18	21	21	22	21	21	24	16	8	4	2	2	4
	U Q					U 24	28	34	40	43	46	49	50	49	49	50	50	49	48	48	O S 46				
00	L Q					U U 19	20	31	36	38	41	44	44	U 42	43	45	44	40	40	40	U 31				
foF1	MED											380	380	380	390	380	370								
	CNT									1	3	7	12	14	13	13	7	4	1						
	U Q											390	390	U 390	400	385	380								
10	L Q											U 360	370	380	375	360	370								
foE	MED								R 190	O R 220	240	260	260	O R U 270	275	O R 250	O R 250	238	215						
20	CNT	1	1				1	2	6	7	9	9	6	8	5	7	7	8	6	3	3	1			
foEs	MED	M 46	M 43	M 45	M 44	M 28	24	18	E 20	E 22	E 25	E 26	E 27	E 27	E 28	26	E 26	E 24	24	34	36	M 36	M 39	M 42	M 35
	CNT	18 M	19 M	18 M	20 M	10 M	10 M	8	11 E	10 E	10	9	9	10 E	10	9	12	13	15	18 M	14 M	23 M	23 M	20 M	19 M
	U Q	51 M	60 M	58 M	56 M	46	36	22	21 E	25 E	25 E	27 E	29 E	29 E	29 E	28 E	27 E	32 E	32 E	49	42	39	75 M	68 M	64 M
30	L Q	42	35	38	34	18	14	15	19	21	24	26	23	25	27	25	24	23	23	20	23	28	33	34	33
M 3000 F2	MED					U F 300	305	325	325	328	322	318	310	310	305	308	308	315	310	320	U 310				
	CNT		1	2	2	7	8	11	15	16	12	10	16	17	16	20	18	19	23	15	6	4		2	3
	U Q					U F 310	315	340	335	330	335	325	325	330	315	320	320	320	320	U S 330	U F 330				
03	L Q					U R 290	U 295	320	315	310	315	300	300	290	275	278	300	290	300	310	U 280				
h'F2	MED										300	330	330	340	340	345	345	320	E 360						
	CNT									3	6	9	15	15	16	18	12	11	6	2					
	U Q										350	360	370	E 400	395	410	360	450	390						
04	L Q										270	310	300	300	305	330	310	300	330						
h'E	MED								127	121	117	119	117	118	119	121	119	121	120	121					
24	CNT	1	1				3	3	7	9	9	9	7	10	5	7	7	9	6	5	3	1			
h'F	MED			360		335	290	260	232	238	222	208	215	220	225	230	230	230	250	250	270	310	E 320		E A 350
	CNT	2	3	5	4	10	8	11	16	18	12	12	15	17	16	19	18	16	21	17	15	13	6	4	5
	U Q			E 410		360	E 310	280	E 268	E 8 275	230	220	230	E 8 E 230	235	E 8 E 250	E 8 E 260	E 8 E 265	315	300	300	E 345	360		E A 430
16	L Q			335		290	275	240	225	E 220	205	200	190	205	200	220	210	220	225	232	250	275	300		E A 300
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

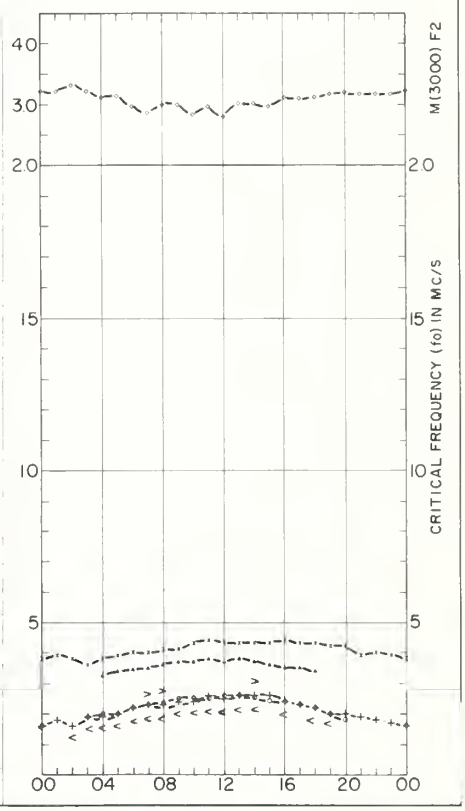


THULE
GREENLAND

LAT. 76.0N LONG. 68.0W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W 1963 08 THULE 75 0W

AUGUST 1963

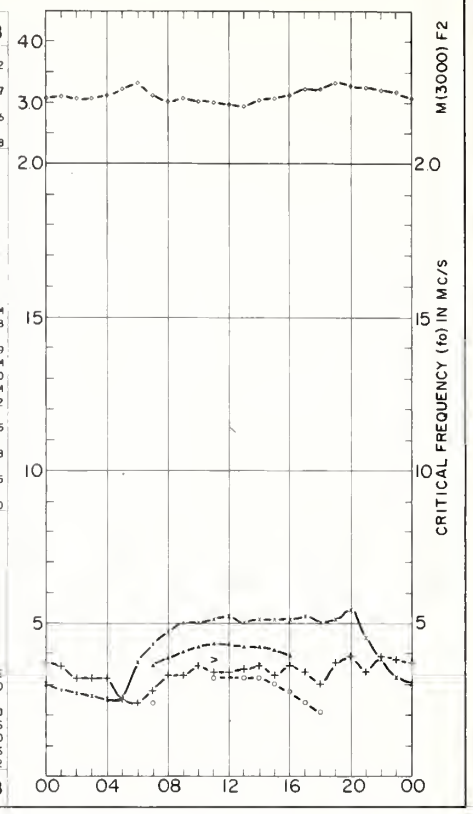
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U F 38	U F 39	U F 38	U F 36	U F 38	U F 39	F U 40	40	U F 41	U F 41	U F 43	U F 44	U F U 43	F 43	U F 43	43	U F 44	U F 43	U F 43	U F 42	U F 42	U F 39	U F 40	U F 39
	CNT	23	22	17	19	21	23	23	22	18	14	18	19	19	23	17	19	22	22	22	22	24	24	22	24
	U Q	U F 42	U F 42	U F 42	U F 41	U F 40	U F 41	U F 42	U F 44	U F 45	U F 42	U F 48	U F 46	U F 47	U F 45	U F 45	U F 45	U F 47	U F 48	U F 45	U F 44	U F 45	U F 44	U F 42	U F 42
00	L Q	U F 36	U F 35	U F 33	U F 34	F U F 35	U F 37	E 38	E 37	U F 39	U F 40	U F 38	E 40	E 38	F 40	U F 40	U F 42	U F 41	F 40	U F U F 40	U F 38	U F 35	U F 35	U F 37	U F 35
foF1	MED					U 325	340	345	350	360	370	370	380	370	380	370	360	U 350	350	340					
	CNT				3	6	11	12	20	21	21	26	27	28	26	24	24	18	15	6	3	2			
	U Q					F 340	350	355	F U 360	U 365	380	380	380	380	380	380	370	360	350	350					
10	L Q					310	U F 320	340	340	340	360	360	360	F 370	370	360	350	U F U L 340	330	330					
foE	MED	U R 160			U 190	U 200	U R U R O R 200	220	230	O 235	U R 250	252	250	U R 258	D 260	252	242	240	230	218	U 200	U 180			
20	CNT	6	2	3	7	14	15	15	16	14	9	14	15	12	15	16	16	22	15	12	14	9	2	2	
foEs	MED	16	18	E 16	E 19	E 19	E 20	E 22	E 23	E 23	E 24	E 24	E 26	E 25	E 26	E 26	E 26	E 24	E 23	E 22	E 20	20	19	18	17
	CNT	15	18 M	15	18	23 E	26	26 E	27	25	24	28	28	27	26	26	27	27	26	25	24	22	21	15	17
	U Q	25 E	33 E	24 E	20 E	21 E	22 E	23 E	26 E	26 E	26 E	27 E	38 E	30 E	29 E	32 E	35 E	30 E	32 E	23 E	28 E	26 E	24 E	34 E	38 E
30	L Q	15	15	14	16	18	17	21	21	21	16	20	24	20	25	24	24	24	21	20	19	17	15	16	14
M 3000 F2	MED	U F 320	U F 320	U F 330	U F 320	U F 310	U F 312	295	285	U 298	298	F 282	U F 295	278	300	300	U F 295	U F 310	U F 308	U F 310	U F 315	U F 318	U F 315	U F 315	U F 315
	CNT	18	18	13	17	17	16	21	19	12	10	14	17	14	17	14	13	19	20	17	17	22	21	21	21
	U Q	U F 330	U F 340	U F 340	U F 340	U F 328	U F 335	333	U F 305	U F 315	F 310	U F 305	F 312	U 300	U F 318	U F 315	F 315	U F 320	U F 325	U F 322	U F 330	U F 330	U F 330	U F 330	U F 320
03	L Q	U F 310	U F 310	U F 305	F 295	F 272	288	288	G	G 270	G	G	G 265	G	G	G	260	F 305	F 290	F 298	F 302	U F 310	U F 300	U F 302	U F 305
h'F2	MED				250	U F 326	354	U F 360	390	U F U F 365	383	357	375	U F 385	358	U F 404	360	U F 320	314	288	285	290	270		
	CNT	3	1	2	9 G	12 G	14	13 F	21 G	14 U	17 U	18 U F	21	22 F	22	22 F	22	17 U F	20 U	14 U F	5 U F	8 U	5	2	1
	U Q					373 E	405	440 U	U	500 U F	490 U F	550 U F	505	540 U F	540	518 U F	400 F	340	334	340	330	349	272		
04	L Q				241	264	295	314	345	340	340	330	330	331	322	340	330	300	286	262	280	270	255		
h'E	MED	E B E 130	130	E 126	124	118	120	110	110	110	104	102	108	109	105	110	110	110	110	E 120	125	E B E 130	E 130	E 140	E 130
24	CNT	7	8	12	14	17	24	23	23	23	22	25	21	23	24	22	24	26	24	21	19	15	14	11	9
h'F	MED	240	240	240	225	225	212	220	220	210	215	200	209	214	215	215	213	220	219	227	230	230	231	240	240
	CNT	27	27	25	25	25	26	27	27	27	25	28	27	29	27	27	26	27	27	27	25	27	27	25	26
	U Q	E 260	250	251	240	230	225	230	230	225	227	220	215	214	215	220	225	223	230	235	E 238	248	251	251	250
16	L Q	235	230	E 230	210	210	209	210	208	200	200	199	200	195	198	201	200	210	210	210	218	E 225	212	230	231
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



BOULDER COLORADO — LAT. 40.0N LONG. 105.3W — SWEEP 0.25 MC TO 20.0 MC IN 27 SEC — TIME 105.0W — 1963 08 — BOULDER — 105.0W

AUGUST 1963

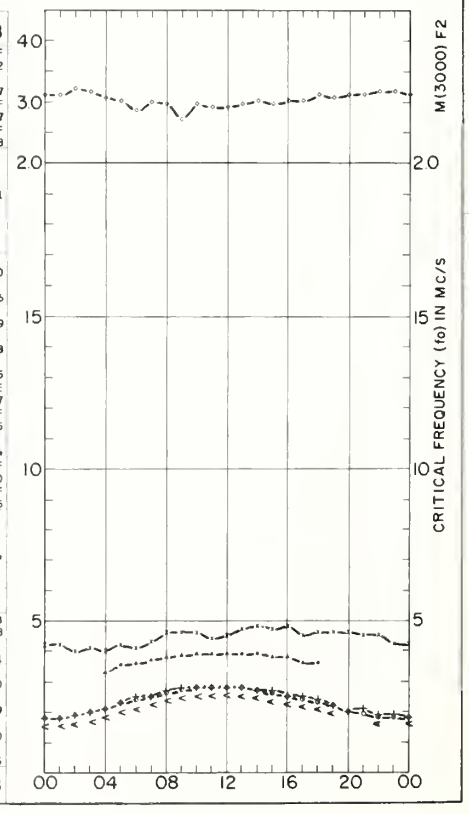
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	30	28	27	26	25	26	37	43	47	50	50	51	52	50	51	51	51	52	50	51	54	45	38	32
	CNT	24	26	26	24	25	28	30	29	31	29	30	31	29	29	28	31	28	30	30	30	28	28	22	27
	U Q	34	31	29	28	27	28	37	46	51	54	54	55	54	54	56	55	55	54	53	55	56	49	40	36
00	L Q	26	24	25	24	22	24	35	40	44	47	47	46	48	48	49	49	48	49	49	49	50	42	34	28
foF1	MEO								360	385	405	420	430	430	420	420	410	390							
	CNT							1	9	18	24	24	27	27	26	24	22	8							
	U Q								360	390	415	420	430	430	430	430	420	400							
10	L Q								350	380	400	410	420	420	420	420	400	390							
foE	MEO								240				320		320	320	300	275	240	208					
20	CNT						1	4	7	3	2	2	5	3	7	9	14	13	15	6					
foEs	MEO	37	36	32	32	32	25	24	28	33	33	36	34	34	35	36	33	36	34	30	37	39	34	39	38
	CNT	19	20	17	18	19	28	30	30	29	28	29	31	30	29	25	31	28	30	30	29	21	26	25	19
	U Q	48	44	40	39	38	32	33	33	38	38	42	47	39	40	46	40	49	49	45	58	58	53	58	50
30	L Q	30	30	28	30	29	12	21	26	30	32	33	32	30	31	32	30	32	28	24	28	28	30	29	32
M 3000 F2	MEO	305	308	305	305	310	320	330	310	300	305	300	298	295	292	302	305	310	320	320	330	325	322	318	315
	CNT	17	16	15	15	17	21	29	29	30	28	30	30	29	28	28	31	28	29	30	26	23	20	18	18
	U Q	310	315	315	315	320	330	342	328	330	320	310	305	308	300	310	310	318	330	330	335	330	330	325	325
03	L Q	295	300	300	300	302	305	320	300	290	290	280	275	272	278	292	295	300	310	315	320	310	318	305	310
h'F2	MEO								355	362	350	380	389	400	390	355	350	E 330	308	281					
	CNT							4	20	29	27	30	30	29	29	28	30	27	17	7	1				
	U Q								407	408	420	430	438	458	430	400	380	369	325	290					
04	L Q								319	304	310	340	350	345	355	336	328	310	274	250					
h'E	MEO						119	108	105	101	100	100	100	100	100	100	100	102	105	110					
24	CNT						13	23	30	31	28	30	31	28	29	28	28	28	24	17	E			E S E S	
h'F	MEO	E S E S E S E S 270 280 280 276				E S 273	252	220	206	200	189	188	188	190	200	206	204	210	215	229	238	234	232	250	260
	CNT	30	27	28	28	27	29	29	28	30	29	29	30	29	28	26	30	23	25	26	29	30	30	29	30
	U Q	E S E S E S E S 282	290	290	290	E S 300	274	230	214	210	200	195	193	E 200	205	210	210	219	220	230	244	E 240	240	E S E S 260	270
16	L Q	E S E S E S E S 260	260	264	270	E S 260	240	206	200	189	185	180	180	E 190	190	200	200	202	210	219	229	E 223	E S 222	S E S 231	242
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



THULE GREENLAND — LAT. 76.0N LONG. 68.0W — SWEEP 1.0 MC TO 25.0 MC IN 27 SEC — TIME 75.0W — 1963 05 — THULE — 75.0W

MAY 1963

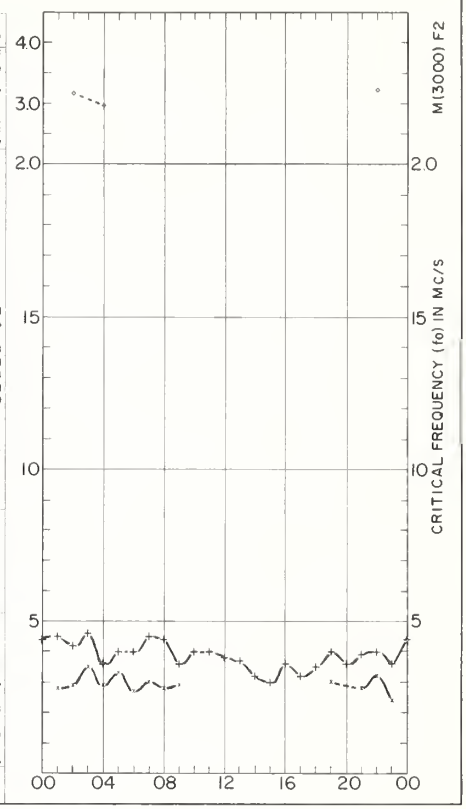
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	U F 42	U F 42	U F 40	U F 41	U F 40	U F 42	U F 41	U F 43	U F 46	U F 46	U F 46	U F 44	U F 45	U F 47	U F 48	U F 47	U F 48	U F 45	U F 46	U F 46	U F 46	U F 45	U F 45	U F 42
	CNT	28	26	24	21	22	22	21	18	16	14	14	18	15	17	20	24	23	23	23	24	22	25	23	27
	U Q	U F 45	U F 45	U F 45	U F 46	U F 45	F 45	U F 44	U F 45	U F 47	U F 49	U F 48	U F 47	U F 49	U F 48	U F 50	U F 49	U F 51	U F 48	U F 48	F 49	U F 49	U F 46	U F 47	U F 47
00	L Q	U F 38	U F 39	U F 38	U F 38	U 36	U F 39	39	39	U F 44	E 40	E 38	U F 43	U F 42	F 44	U F 44	U F 44	U F 45	U F 43	U F 42	U F 42	U F 41	U F 40	U F 40	U F 38
foF1	MEO					U 330	U 355	U 360	370	380	385	390	390	390	390	390	380	380	U 360	360					
	CNT	1		4	4	12	16	23	29	27	24	24	26	27	27	26	25	23	14	7	3	1			1
	U Q					U 350	U F 360	U 370	U 380	390	400	400	400	400	400	400	390	380	U 380	U F 360					
10	L Q					U 320	U F 350	U 340	360	F 360	380	380	380	380	380	F 380	F 370	370	360	350					
foE	MEO	U 180	U 180	U 190	U F 200	210	230	240	U 250	U R 262	U R 272	U 280	280	280	278	U R 270	U R 260	U 250	240	230	220	U 200	192	180	180
20	CNT	E 10	E 16	E 15	E 23	E 26	E 24	E 21	E 27	E 20	E 16	E 17	E 15	E 16	E 22	E 15	E 15	E 17	E 21	E 19	E 20	14	12	E 12	6
foEs	MEO	18	18	19	20	21	23	25	25	27	28	28	28	28	28	27	27	25	25	24	22	20	21	E 19	19
	CNT	25	25	24	E 27	E 28	E 28	E 29	E 29	29	30	29	29	29	E 29	28	29	E 28	E 27	E 27	E 28	26	26	25	23
	U Q	E 20	E 19	E 20	E 21	E 22	E 24	E 40	E 26	E 28	E 30	E 34	E 37	E 30	E 28	E 31	E 32	E 26	E 28	E 25	E 24	E 31	E 24	E 22	E 25
30	L Q	E 17	E 18	E 18	E 20	E 20	E 22	E 23	E 26	E 26	E 26	E 26	E 28	E 27	E 27	E 26	E 25	E 24	E 24	E 23	E 21	E 19	E 19	E 18	17
M 3000 F2	MEO	U F 310	U F 310	U F 320	U F 315	F 305	F 300	285	U F 298	U F 295	U F 270	U F 295	F U F 290	290	U F 295	U F 300	U F 295	U F 300	U F 300	U F 310	U F 305	U F 310	U F 310	U F 315	U F 315
	CNT	23	18	17	15	17	18	19	16	13	11	13	14	11	14	17	20	20	15	19	19	19	20	22	24
	U Q	U F 325	U F 330	U F 332	U F 325	U F 325	U F 325	F 320	U F 308	U F 310	U F 305	U F 302	U F 305	U F 300	U F 300	U F 308	U F 302	U F 312	U F 315	U F 325	U F 320	U F 320	U F 315	F 325	U F 330
03	L Q	U F 300	U F 300	U F 300	U F 305	F 275	280	255	268	U F 265	G	G	U F 245	G	275	F 288	282	F 295	U F 290	U F 285	U F 295	U F 305	U F 302	U F 310	U F 295
h'F2	MEO	U 280		290	310	U F 354	U F 360	U 395	U 380	U F 360	U F 370	U F 368	F 360	U F 382	U F 385	U F 350	U F 362	E 340	332	U 308	U 320	U 285			
	CNT	6	2	7	14	14	18	20	22	22	19	21	20	22	24	27	28	22	20	12	15	14	3	4	4
	U Q	U L 330		370	320	U 480	U 428	U 455	U F 410	U F 410	450	F 472	F 518	U F 440	U F 418	U F 430	E 392	354	355	350	U 335	300			
04	L Q	U 280		275	281	F 285	310	U 310	349	U F 335	U F 330	U F 315	U F 343	F 350	350	325	325	F 311	U 312	285	U 270	260			
h'E	MEO	E 8 E 8 E 8 125	120	120	110	110	110	108	108	108	108	108	105	105	106	109	109	109	108	110	112	112	120	E 8 120	E 8 128
24	CNT	21	23	21	25	26	28	28	28	27	28	27	28	27	27	26	28	27	26	24	26	21	23	20	21
h'F	MEO	240	234	230	225	225	220	214	E 218	210	218	210	205	210	208	210	210	210	210	220	215	225	228	240	240
	CNT	31	30	30	29	30	30	28	30	28	27	24	28	26	29	29	27	26	27	26	27	27	26	28	29
	U Q	255	246	250	236	230	230	222	220	225	228	220	214	220	215	218	220	218	220	222	225	235	240	250	E 250
16	L Q	230	221	220	210	210	209	206	202	200	207	202	200	200	202	199	195	200	205	210	205	211	220	229	235
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



POLE STATION ANTARCTICA LAT. 90.0S LONG. . SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0 1962 06 POLE STATION 0.0

JUNE 1962

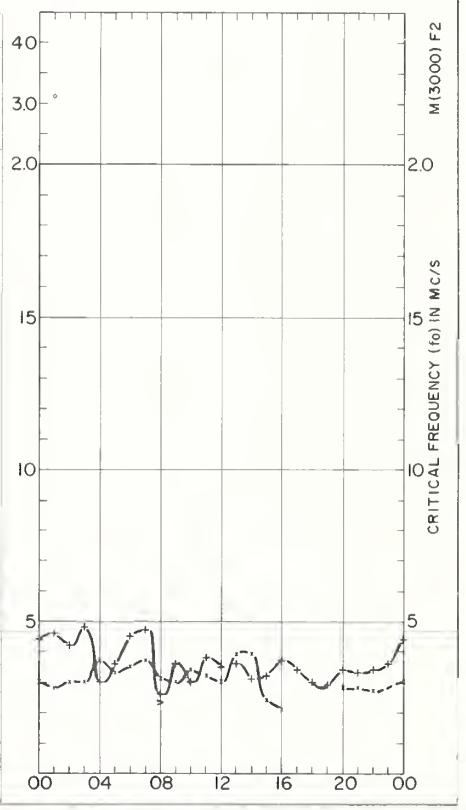
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		U F 28	U F 29	U F 35	U F 29	U F 33	U F 27	U F 30	U F 28	U F 29										U F 30		U 28	U F 32	U F 24
	CNT	4	9	14	8	15	6	11	7	6	5	4	2	2	4	4	2		2	3	8	2	6	9	7
	U Q		U F 28	U F 30	U F 40	U F 33	U F 37	U F 32	U F 38	U F 34	U F 34										U F 35		U F 32	U 33	U 31
00	L Q		U F 26	U F 27	U F 30	U F 26	U F 29	U F 25	U F 20	U F 23	28										U F 27		U A 25	28	U F 17
foF1																									
10																									
foE	MED																								
20	CNT										1														1
foEs	MED	M 44	M 45	M 42	M 46	M 36	M 40	M 40	M 45	M 44	M 36	M 40	M 40	M 38	M 37	M 32	30	M 36	M 32	M 35	M 40	M 36	M 39	M 40	M 36
	CNT	24 M	19 M	16 M	15 M	14 M	15 M	16 M	18 M	25 M	23 M	23 M	24 M	23 M	23 M	22 M	13	18 M	19 M	25 M	26 M	26 M	28 M	24 M	28 M
	U Q	64 M	88 M	62 M	82 M	43 M	67 M	48 M	55 M	58 M	49 M	48 M	49 M	48 M	52 M	39 M	40	42 M	41 M	62 M	57 M	49 M	50 M	56 M	48 M
30	L Q	32	31	30	33	28	32	30	26	34	29	30	34	32	33	29	24	29	22	25	29	31	34	32	29
M 3000 F2	MED			U F 315		U F 295																		320	
	CNT			6	2	5	3	2	3	1	4	2	1		2	1	1				3	1	2	5	2
	U Q			U 340		U F 340																		352	
03	L Q			U F 290		280																		F 295	
h'F2																									
04																									
h'E	MED																								
24	CNT										1						1		1						1
h'F	MED	240	231	237	227	245	286	248	285	282						262					242	240	276	250	246
	CNT	7	12	18	16	E 19	20	18	11	7	4	4	2	4	4	E 8	3	3	4	1	9	8	6	9	8
	U Q	282	242	262	262	274	302	296	317	325						291					288	268	338	322	280
16	L Q	230	222	227	214	229	248	232	262	U F 268						236					223	214	217	224	226
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



POLE STATION ANTARCTICA LAT. 90.0S LONG. SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0 1962 05 POLE STATION 0 0

MAY 1962

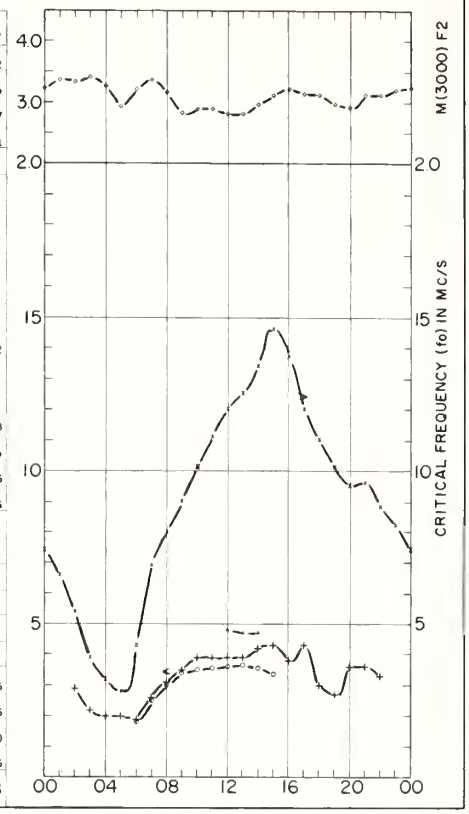
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U F 30	U F 28	U F 30	U F 30	U F 37	U F 33	U F 35	U F 37	U F 31	U F 30	U F 34	U F 32	U 30	U F 39	U F 39	U F 24	U F 21				U F 28	U F 28	U F 27	
	CNT	9	15	11	14	11	17	11	11	8	10	12	9	8	5	6	5	5	2	2	4	8	5	8	4
	U Q	U F 32	U F 35	U F 37	U F 41	U F 42	U F 39	U F 40	U F 42	U F 36	U F 35	U F 40	U F 40	U 30	U F 43	U F 41	U F 30	U F 22				U 32	U 30	U F 30	
00	L Q	U F 26	U F 24	U F 22	U F 26	U F 29	U F 29	U F 30	U F 30	U F 30	U F 28	U F 30	U F 26	U 26	U 28	U F 33	U F 18	F 18				U F 22	U 26	U F 20	
foF1																									
10																									
foE	MED																								
20	CNT									1	2	2	2	2	2	1			1	1	1	3	1	3	
foEs	MED	M 44	M 46	M 42	M 48	M 30	M 36	M 45	M 47	D M 26	M 36	M 30	M 38	M 35	M 36	M 31	M 32	M 37	M 34	M 30	M 29	M 34	M 33	M 34	M 36
	CNT	21 M	22 M	20 M	18 M	17 M	20 M	19 M	21 M	20 M	26 M	28 M	28 M	25 M	26 M	25 M	21 M	19 M	25 M	26 M	26 M	29 M	29 M	24 M	22 M
	U Q	60 M	68 M	52 M	71 M	54 M	48 M	66 M	54 M	46 M	44 M	48 M	44 M	46 M	47 M	45 M	44 M	48 M	54 M	40 M	37 M	47 M	40 M	39 M	56 M
30	L Q	31 M	36 U F	30 M	36 M	E	12	40 M	31	20	25	27	30	30	30	23	20	33 M	25 O	20	20	27	26	26	28
M 3000 F2	MED		310																						
	CNT	1	5	2	3	2	4	2	2	4		1	3	1	1	3	3	1	1			2	1	1	2
	U Q		318 U																						
03	L Q		290																						
h'F2																									
04																									
h'E	MED																								
24	CNT									1	2	2	1	2	2	1	1		1	1	1	2	1	2	
h'F	MED	E 234	241	256	242	273	246	250	252	275	269	278	266	284	252	252	270	U 262	U 250	261	260	282	238	U 232	238
	CNT	18	22	24	25	27	26	25	23	17	11	12	8	6	9	8	E A 7	11	5	8	7	10	10	11	11
	U Q	252	262	275	286	305	270	273	291	291	282 U F	322	298	U 298	280	275	370	U 319	U 269	282	U 290	U 308	U 284	254	U F 275
16	L Q	228	232	240	226	236	231	236	235	246	255	256	248	250	U 232	242	250	U 243	222	224	212	U F 265	231	U F 220	216
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



BOGOTA
COLOMBIA LAT. 4.5N LONG. 74.2W SWEEP 1.0 MC TO 25.0 MC IN 27 SEC TIME 75.0W 1962 04 BOGOTA 75.0W

APRIL 1962

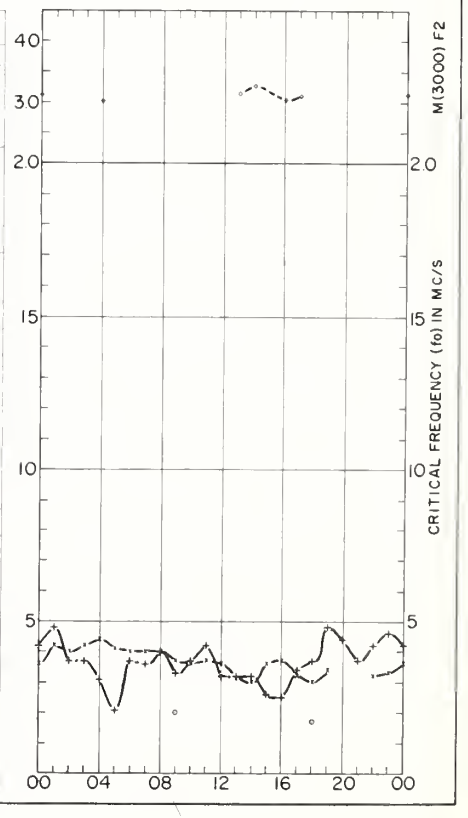
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	74	66	54	39	32	28	43	69	80	90	101	111	120	125	134	146	137	120	110	101	95	96	88	82
	CNT	16	16	15	15	15	15	15	13	13	12	12	12	13	16	16	16	17	17	16	15	15	14	15	14
	U Q	86	70	65	51	38	32	45	72	84	95	106	116	122	128	140	155	154	130	118	111	120	100	104	97
00	L Q	68	59	43	30	25	23	41	66	74	88	98	106	110	119	132	137	130	112	107	95	93	85	80	71
foF1	MEO													480	470	470									
	CNT											3	4	9	9	5	1								
	U Q													495	500	490									
10	L Q													465	460	470									
foE	MEO							180	250	300	340	350	355	360	365	355	335								
20	CNT							7	13	13	9	7	8	11	13	10	7	4	2	1					
foEs	MED			29	22	20	20	19	26	31	35	39	39	39	39	42	43	38	43	30	27	36	36	33	
	CNT	4	3	5	6	6	8	15	13	13	12	12	12	13	16	16	17	17	17	13	9	8	8	8	2
	U Q			30	38	34	26	25	27	34	40	45	44	46	44	46	52	47	47	40	58	42	45	38	
30	L Q			28	13	17	15	18	25	30	34	35	35	36	36	38	38	33	26	18	24	30	23	29	
M	MEO	322	335	332	340	325	292	320	335	315	282	288	288	280	280	295	310	320	312	310	295	290	310	310	318
3000	CNT	16	16	16	15	15	16	16	13	13	12	12	12	13	16	15	16	16	16	16	13	14	11	14	14
F2	U Q	340	355	358	355	345	312	330	342	328	308	300	302	288	285	300	318	322	318	315	302	305	320	320	335
03	L Q	308	310	310	310	320	282	312	325	292	278	280	275	275	275	290	302	310	305	305	288	285	290	300	305
h'F2	MEO										305	315	320	330	348	330	290	270	252						
	CNT									3	6	10	10	11	14	15	17	17	10						
	U Q										310	325	340	345	360	335	310	288	260						
04	L Q										295	305	310	325	320	320	270	260	240						
h'E	MEO								114		113	111	111	113	111	110	111	109	110						
24	CNT							3	12	13	11	12	12	13	16	15	12	12	6						
h'F	MEO	230	225	232	228	242	278	255	230	220	212	215	202	205	205	208	212	228	230	240	250	270	250	250	245
	CNT	17	17	16	16	16	16	16	13	13	12	10	10	11	13	12	10	10	13	16	15	15	15	15	15
	U Q	260	272	252	245	265	308	260	238	230	218	220	215	205	205	222	225	230	242	250	260	285	275	255	260
16	L Q	220	210	210	212	230	250	250	210	215	200	205	195	200	200	198	210	220	225	230	235	250	235	240	225
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



POLE STATION
ANTARCTICA LAT. 90.0S LONG. . SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0 1962 04 POLE STATION 0.0

APRIL 1962

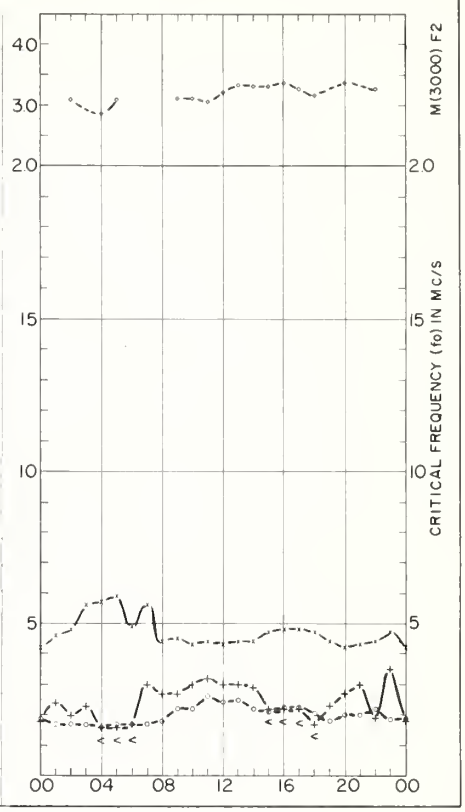
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	36	42	40	42	44	41	40	40	40	37	36	37	36	31	30	36	37	32	30	34			32	33
	CNT	14	13	15	10	14	9	12	9	11	11	12	6	9	7	10	14	15	11	7	6	3	3	9	9
	U Q	40	44	47	48	49	52	44	46	42	40	40	40	37	36	36	40	41	42	36	40			38	38
00	L Q	29	37	36	37	40	38	38	30	29	35	30	35	31	27	28	32	30	29	27	29			26	26
foF1																									
10																									
foE	MEO										200								170						
20	CNT	1				1	1	1	3	4	6	4	4	4	4	4	2	3	4	5	2	2	4	2	
foEs	MEO	42	48	37	37	31	21	37	36	40	33	37	42	32	32	32	26	25	34	37	48	44	37	42	46
	CNT	19	23	16	15	16	19	15	22	26	24	23	22	20	22	21	17	18	18	24	26	26	27	29	24
	U Q	61	77	54	54	56	48	67	48	50	43	51	51	64	47	40	32	32	52	52	65	64	56	56	66
30	L Q	32	41	30	15	16	13	18	22	26	25	27	26	28	26	22	18	19	25	25	37	34	26	35	34
M	MEO	310				300									312	325		302	308						
3000	CNT	5	1	3	2	5	1	2	2	2	1	1	1	3	6	6	4	6	6	1	2	1	1	3	3
F2	U Q	325				300									315	330		330	310						
03	L Q	292				280									305	300		290	300						
h'F2																									
04																									
h'E	MEO								125		115									123	143		129		
24	CNT	3	4	2	1	2	1	2	7	3	6	4	3	4	4	4	2	1	3	6	5	4	6	3	2
h'F	MEO	241	249	258	246	252	273	267	270	286	290	316	305	315	295	292	284	281	287	276	282	264	241	241	242
	CNT	28	26	29	23	25	26	27	23	22	18	12	8	10	9	13	16	20	15	13	13	14	17	19	19
	U Q	262	285	274	273	278	304	277	290	312	325	335	336	323	332	310	302	316	327	296	325	283	278	259	270
16	L Q	230	242	231	234	226	255	241	255	269	273	290	284	287	272	256	276	262	274	256	254	236	236	227	225
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



POLE STATION
ANTARCTICA LAT. 90.0S LONG. . SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0 1962 03 POLE STATION 0.0

MARCH 1962

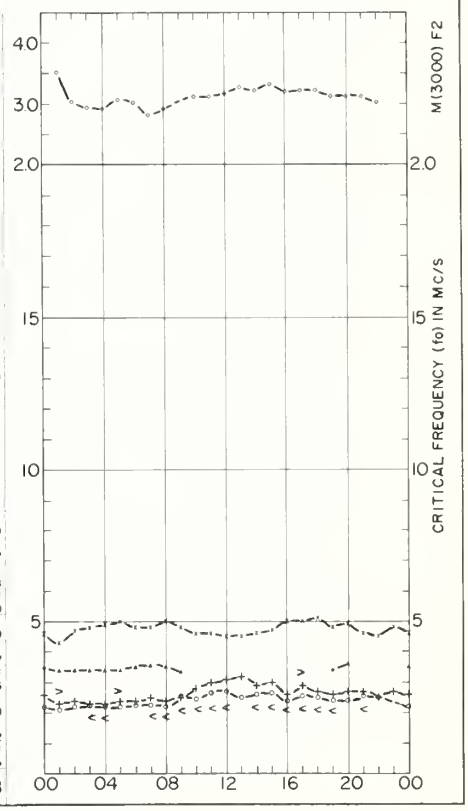
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U F 42	U F 46	U F 48	U F 56	U F 57	U F 59	U F 49	U F 56	U F 44	U F 45	U F 43	U F 44	43	U F 44	44	F 47	U F 48	U F 48	U F 47	U F 44	U F 42	U F 43	U F 44	U F 47
	CNT	10	10	17	17	19	16	11	5	10	15	19	22	17	20	24	26	26	23	18	14	11	7	12	9
	U Q	U F 46	U F 56	U F 55	U F 63	U F 65	U F 64	U F 67	U F 73	U F 50	U F 46	U F 48	U F 48	U 46	U F 46	U 48	U F 54	U F 52	U F 57	U F 51	U F 51	U F 45	U F 50	F 46	U F 48
00	L Q	U F 38	U F 39	U F 42	U F 46	U F 45	U F 48	U F 43	U F 47	U F 37	U F 42	U F 41	U F 38	39	U F 40	42	44	45	46	U F 43	U F 40	U F 40	U F 42	U F 41	U F 43
foF1	MED																								
	CNT			1			1	1	1	3	1	1	3	1				2		1		1			
	U Q																								
10	L Q																								
foE	MED	U F 188	U 170	U F 170	U F 168	U F 160	U F 170	U F 170	U F 170	U F 180	U F 220	U F 220	U F 262	U F 242	U F 248	220	210	U 225	U 225	U F 205	U F 180	U 200	U F 200	U F 218	U F 185
	CNT	12	5	13	16	17	19	12	9	7	8	10	10	14	12	12	13	17	16	16	18	15	15	10	14
20						E	E	E	M								E	E	E	E					M
	MED	18	24	20	23	16	16	17	30	27	27	30	32	30	30	29	22	22	22	17	23	27	30	19	35
foEs	CNT	30	30	31	31	31	30	31	31	31	31	29	30	31	28	26	26	24	28	29	31	31	31	31	31
		M	M	M	M	M	M	M	M	M	M		M		M						M	M	M	M	M
	U Q	36	34	38	46	32	25	32	54	32	45	35	44	36	36	33	30	26	32	30	52	62	47	54	50
30	L Q	E 14	E 15	E 14	E 15	E 13	E 13	E 14	E 14	E 16	E 15	E 16	E 15	E 15	E 15	E 14	E 17	E 16	E 16	E 14	E 14	E 14	E 14	E 13	E 16
M	MED			F 308		U F 285	U F 308			U F 310	U F 310	U F 305	F	U 320	332	330	330	F 335	F 325	315		335		U F 325	
3000	CNT	4	2	6	4	5	6	2	2	3	6	8	12	15	12	19	19	15	18	12	4	6	4	7	1
F2				F		F U F				U F U F		U F	F	U			U F		U F			F		F	
	U Q			325		310	320			330	318	318	345	340	340	340		345	335	342		345		340	
03	L Q			U F 300		U F 272	U F 285			U F 295	U F 302	F 292	F 310	U F 315	U F 320	F 320		F 310	F 295	305		315		U F 325	
h'F2	MED						284	292		393								349							
	CNT	1	1	3	2	3	5	5	2	6	4		3	2	1	1	1	5	4	1	1	2	2		1
										U F															
	U Q						314	360		470								414							
04	L Q						272	256		307								327							
h'E	MED		E 115	115	119	119	122	126	E 122	113	120	109	117	114	109	112	114	109	103	109	113	114	115	111	118	119
24	CNT	20	16	17	21	22	20	18	18	18	17	14	12	14	14	14	12	14	21	20	22	17	20	24	23
	MED	239	242	243	248	248	246	250	244	249	268	268	270	267	268	267	252	260	256	258	259	262	262	250	236
h'F	CNT	26	29	31	29	30	29	27	23	26	24	24	21	E 21	E 22	24	28	E 28	26	24	24	20	24	24	24
	U Q	254	262	256	253	257	257	265	255	267	284	283	290	297	290	283	263	280	268	275	289	281	274	260	256
16	L Q	230	223	234	239	238	234	237	232	231	260	236	252	257	250	240	238	238	241	244	236	246	250	240	226
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



POLE STATION
ANTARCTICA LAT. 90.0S LONG. . SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0 1962 02 POLE STATION 0.0

FEBRUARY 1962

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U F 46	U F 43	U F 47	U F 48	U F 49	U F 50	U F 48	U F 48	U F 50	U F 48	U F 46	46	U 45	45	46	47	50	U 50	U 51	48	U F 49	U F 46	U F 45	U F 48
	CNT	19	20	18	19	17	20	16	13	17	14	15	16	17	18	22	20	22	20	16	12	14	16	16	14
	U Q	U F 54	U F 51	U F 53	U F 50	U F 56	U F 57	U F 57	U F 54	U F 58	U F 53	U F 52	U F 48	U F 48	U 48	47	F 50	F 52	56	54	51	U F 52	U F 50	U F 50	U F 54
00	L Q	U F 42	U F 40	U F 46	U F 44	U F 44	U F 44	U F 46	U F 44	U F 46	U F 43	U F 41	U F 41	42	40	42	46	46	U F 46	U 48	U F 45	U F 42	U F 42	U F 42	U F 44
foF1	MED	U F 350	F 340	340	U F 340	340	U F 340	350	355	U F 350	U F 335										U 340	U F 360			
	CNT	6	5	9	7	9	5	9	8	5	6	2	3	3	3	2	1	4	4	4	7	5	2	4	1
	U Q	U F 350	F 350	350	U F 360	U F 355	365	U F 350	U F 360	U F 360	350										350	U F 370			
10	L Q	350	340	U F 335	320	U F 335	325	U F 330	340	U F 335	U F 320										U F 330	U F 310			
foE	MED	U D 220	U 210	U 220	U F 225	U 220	U 220	U F 225	225	U F 220	U 255	U F 245	U F 265	U F 270	250	U 260	U F 265	U R 238	D 255	U 250	U 240	U F 240	U F 255	U F 250	
	CNT	12	8	9	12	13	11	16	13	12	14	10	12	9	9	12	8	12	10	10	13	12	14	7	4
20					E	E	O		E	E	E	E	E	E		E	E	E	E	E	E		E		
	MED	26	23	24	23	23	24	24	25	24	25	28	30	31	32	29	30	26	29	27	26	27	27	25	27
foEs	CNT	21	21	22	20	21	22	21	21	21	21	20	21	19	20	18	19	18	20	19	21	22	22	23	21
		M	M						M	M	E						M	E		M		M		M	M
	U Q	33	66	32	35	28	31	33	48	34	30	36	42	38	39	33	33	30	32	49	32	50	31	32	50
30	L Q	E 22	E 22	E 22	E 22	E 22	E 22	E 23	E 22	E 21	E 22	E 24	E 25	E 27	E 25	E 26	E 26	E 23	E 26	E 24	E 24	E 22	E 23	E 23	E 22
M	MED		U F 350	U F 302	292		290	U F 305	300	U F 280	290		310	310	315	325	320	330	318	320	320	310	U F 310	310	300
3000	CNT	3	5	8	8	7	11	5	6	5	4	11	15	14	17	18	15	16	16	11	8	U F 6	9	5	3
F2			U F	U F			U F	F	U F	F		U F		U F								U F			
	U Q		355	310	300	300	315	310	300	308		330	320	330	330	330	340	338	328	325	318	325	328	338	
03	L Q			320	G 290	G U F	290	258	260	U F 282		295	290	300	312	310	F 300	292	300	300	295	290	288	U F 298	
h'F2	MED	U 302	300	330	336	322	342	330	324	322	328	392	318	362	G 310	292	285	363	313	310	332	U F 375	300		U F 290
	CNT	10	7	14	14	17	19	13	13	10	8	6	9	6	6	7	9	14	10	14	8	11	7	4	7
			U F									G	G	G	G							U F			U F
	U Q	320	381	400	416	406	360	382	422	342	418					418	354	405	382	411	431	448	325		318
04	L Q	U F 270	248	309	295	294	281	304	292	U F 278	310	286	314	288	U 286	282	269	281	275	279	298	308	271		U F 260
h'E	MED	109	109	109	111	109	107	109	109	111	109	107	109	109	109	106	107	107	107	109	109	107	110	109	109
24	CNT	17	15	14	16	15	16	17	16	16	19	11	12	5	9	10	8	13	12	13	16	14	19	16	17
																E	E								U F
	MED	220	216	228	234	223	230	218	228	224	226	242	245	268	255	257	256	250	250	248	249	252	247	242	225
h'F	CNT	20	20	20	21	20	19	21	22	22	18	18	15	15	15	19	16	19	17	14	18	18	19	18	20
	U Q	238	224	245	244	234	241	240	236	245	260	259	273	280	273	279	264	260	268	263	253	268	277	253	232
16	L Q	214	206	220	216	206	218	200	220	212	213	223	208	244	237	245	250	229	225	238	235	211	232	U F 217	206
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



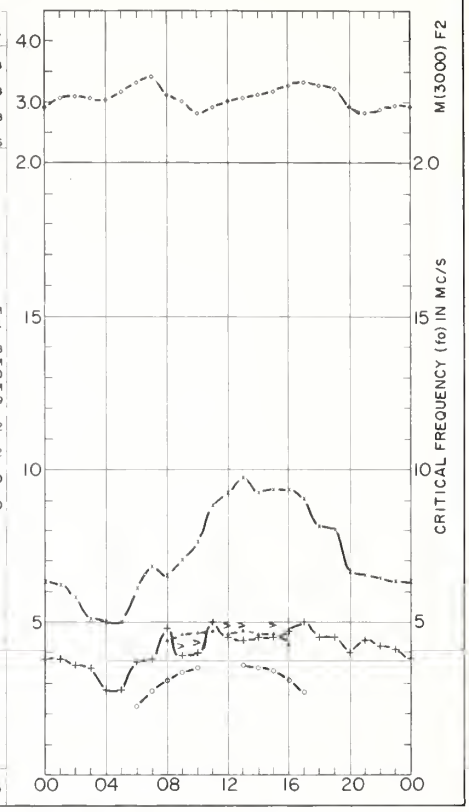
CONCEPCION
CHILE

LAT. 36.6S LONG. 73.0W SWEEP 1.0 MC TO 25.0 MC IN 31.5 SEC TIME 75.0W

1962 01 CONCEPCION 75.0W

JANUARY 1962

CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	63	62	58	51	50	50	61	68	65	70	76	88	92	97	92	93	93	90	81	80	66	65	64	63
	CNT	19	23	24	24	22	29	29	27	27	30	30	26	30	28	30	29	30	30	29	27	28	23	19	23
	U Q	66	66	62	58	56	62	70	74	73	77	85	92	101	106	109	106	102	104	92	85	72	70	73	68
	L Q	58	56	55	47	47	44	56	61	56	62	69	80	83	84	84	86	81	83	70	60	58	58	60	55
foF1 10	MED									440	460	465	470	460	470	460	460	425							
	CNT								1	5	13	14	12	7	13	15	13	8	2						
	U Q									460	460	470	480	490	470	470	460	435							
	L Q									435	445	460	460	460	450	460	440	415							
foE 20	MED						E 225		U 275	310	335	350			358	350	340	310	270						
	CNT						6	6	6	6	7	5	3	3	8	13	14	20	11	1					
foEs 30	MED	38	38	36	35	28	28	37	38	48	39	40	50	45	44	45	45	47	50	45	45	40	44	42	41
	CNT	27	30	28	27	26	28	29	28	30	30	30	27	29	28	29	29	30	31	31	29	28	30	28	28
	U Q	53	50	46	44	39	38	48	53	66	50	56	74	54	52	50	64	55	70	77	74	64	52	52	50
	L Q	28	24	22	21	20	19	26	34	38	38	38	37	38	37	36	36	38	35	33	37	34	36	35	29
M 3000 F2 03	MED	290	305	308	305	302	315	330	340	310	300	280	290	300	305	310	315	325	330	325	320	290	280	285	292
	CNT	19	22	22	24	22	29	29	27	26	29	28	24	27	26	29	25	30	29	26	25	27	20	17	22
	U Q	300	315	330	318	320	332	348	355	330	315	292	305	310	320	318	320	335	340	340	330	295	285	295	300
	L Q	280	285	295	292	290	300	310	310	285	270	270	280	290	295	292	300	310	320	315	312	280	272	280	280
h'F2 04																									
h'E 24	MED					E 159	110	109	109	109	109	110	110	110	110	110	110	110	110	E 119					
	CNT					12	29	28	30	29	27	20	25	24	25	26	29	28	20	1					
h'F 16																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



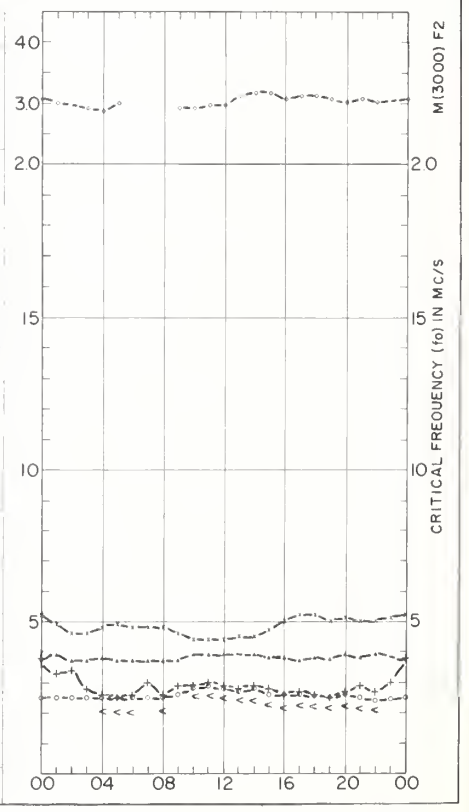
POLE STATION
ANTARCTICA

LAT. 90.0S LONG. . SWEEP 1.0 MC TO 25.0 MC IN 13.5 SEC TIME 0.0

1962 01 POLE STATION 0.0

JANUARY 1962

CHAR	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2 00	MED	52	49	46	46	48	49	48	48	48	46	44	44	44	45	45	47	50	52	52	50	51	50	50	51
	CNT	15	20	16	20	18	21	13	9	13	14	16	20	21	24	27	28	25	23	21	18	19	16	15	17
	U Q	54	54	54	50	54	56	54	49	54	48	47	48	48	48	48	50	54	54	54	56	56	55	52	54
	L Q	46	44	43	43	42	46	42	42	44	44	42	42	44	44	44	45	48	48	48	46	47	46	47	47
foF1 10	MED	375	390	370	370	380	370	370	370	370	370	390	390	390		390	380	380	370	380	375	390	380	390	
	CNT	8	14	14	18	21	15	17	13	16	12	10	7	7	3	7	5	10	11	15	10	13	13	11	4
	U Q	395	390	380	380	390	380	380	385	385	385	390	410	420		390	385	390	380	390	380	400	400	400	
	L Q	355	380	370	360	360	360	355	365	360	370	380	370	380		370	370	370	370	370	370	370	375	370	
foE 20	MED	250	250	250	250	250	250	250	250	250	260	280	288	280	270	280	260	260	260	255	250	260	250	240	245
	CNT	19	17	22	22	22	21	21	23	24	17	16	16	17	21	18	21	22	22	21	20	19	22	16	16
foEs 30	MED	38	33	34	28	26	25	26	30	26	29	29	30	29	28	29	28	26	27	26	25	27	29	27	30
	CNT	29	30	30	29	29	29	29	29	29	29	29	28	27	28	29	30	28	28	29	30	30	30	29	27
	U Q	72	47	52	38	32	27	38	34	30	38	32	36	37	32	31	33	32	32	29	26	34	55	40	62
	L Q	29	26	26	25	24	24	24	24	25	26	27	26	26	26	27	25	25	24	24	24	24	25	24	24
M 3000 F2 03	MED	305	298		290	285	298				290	290	295	295	310	315	315	305	310	310	305	300	305	300	
	CNT	10	8	4	14	11	14	4	2	3	5	7	11	15	20	21	23	17	17	15	12	12	10	8	4
	U Q	320	310		310	300	315				308	320	315	305	332	330	320	330	325	315	318	308	320	310	
	L Q	295	280		275		280				285				285	300	295	282	295	290	302	300	280	278	
h'F2 04	MED	311	354	375	374	350	332	370	362	334	366	365	375	420	323	329	334	322	328	331	325	360	357	335	300
	CNT	15	18	19	22	24	22	20	13	14	12	15	12	11	11	9	16	24	22	21	19	20	15	13	11
	U Q	360	393	420	412	406	362	398	424	365	386	415	530		450	418	368	355	353	388	354	398	417	375	340
	L Q	300	312	320	316	317	304	304	326	310	320	302	336	345	277	301	315	296	295	305	310	322	312	321	295
h'E 24	MED	101	99	101	102	103	102	101	102	102	101	101	101	103	103	101	101	101	101	102	105	103	103	103	102
	CNT	25	27	25	26	28	28	25	28	28	27	26	22	22	22	23	23	25	27	28	29	29	29	28	24
h'F 16	MED	212	213	220	210	205	200	200	198	200	205	226	225	229	226	238	220	E 230	220	220	210	214	205	205	199
	CNT	21	23	22	27	25	23	20	26	19	20	20	19	21	22	E 28	27	25	26	23	21	20	19	19	24
	U Q	223	229	225	225	220	212	214	220	210	220	240	260	245	241	259	230	240	235	228	223	226	264	225	222
	L Q	205	205	210	200	197	195	186	190	177	186	206	214	208	205	216	207	204	210	195	186	186	175	170	185
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23



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